

Cate, H.D.
1947

The development of a seventh grade unit in
sculpture

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THE DEVELOPMENT OF A SEVENTH GRADE UNIT
IN SCULPTURE

Helen Dorothy Cate.

BOSTON UNIVERSITY
SCHOOL OF EDUCATION

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BOSTON UNIVERSITY

SCHOOL OF EDUCATION

Thesis

THE DEVELOPMENT OF A SEVENTH GRADE UNIT
IN SCULPTURE

Submitted by

Helen Dorothy Cate

(B.S., Massachusetts School of Art, 1930)

In partial fulfillment of requirements for
the degree of Master of Education

1947

First Reader: Dr. Roy O. Billett, Professor of Education

Second Reader: Dr. J. Wendell Yeo, Associate Professor
of Education

Third Reader: Mr. Franklin C. Roberts, Professor of
Education

Gift of H D Cate
School of Education
April 29, 1947
28030

III. Results of Teaching the Unit

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1944, a search was made for evidences of a correlation of the social studies with art.

Pasadena, California; Wilmington, Delaware; The Francis W. Parker Schools, Chicago; and the Horace Mann-Lincoln School of Teachers College, Columbia University, New York, were the only cities or schools in which such a correlation was suggested.^{1/}

The Pasadena Source Units and The Horace Mann-Lincoln School Units are the best examples, which came to the writer's attention of a planned correlation of art and the social studies.

The Wilmington and the Baltimore outlines are outstanding examples of superior art curriculum. A correlation could easily be made from the material.

^{1/} See numbers 15, 17, 23, 29, 34, 35, 38, 41, 42, 43, 44, 45, 47, and 49 of the final bibliography.

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General art aims.-- The aims and topical areas of various curriculums were studied and the following statements were chosen: CHAPTER I

THE SCOPE AND PURPOSE OF THIS THESIS

The Problem and the Methods Used

Introduction

The problem.-- The object of this thesis is to show the development of a seventh-grade unit in sculpture which correlates with the social studies.

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"The aim of art education in the secondary schools is to further the growth of individuals in rich enjoyment and effectiveness and encourage them to create a society where such living is possible for all."^{2/}

"Art education should furnish a rich offering of subject matter and of experience, in which balance between information and activity has been carefully observed."^{3/}

"Art education should be integrated with real life situations, and consequently with other subjects."^{4/}

"To develop taste and discriminating judgment through varied art activities suited to all pupils rather than a limited group especially interested in art."^{5/}

"To stimulate the imagination, and give opportunity for the expression of creative ability. To apply the knowledge of art structure to individual problems, and to community and civic problems."^{6/}

^{1/} These aims were part of the requirements of the course: Secondary School Curricula: Status and Trends.

^{2/} Progressive Education Association Publications, The Visual Arts in General Education, p. 18. Commission on Secondary School Curriculum. New York: D. Appleton-Century Company, Inc., 1940.

^{3/} M. E. Haggerty, Art A Way of Life. The University of Minnesota Press, Minneapolis, 1935.

^{4/} Thomas Munro and Others, Art in American Life and Education, p. 453. Fortieth yearbook of the National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1941.

^{5/} Ibid., p. 541.

^{6/} R. L. Stevenson, "Function of Art Education in the Junior High School," p. 60. Unpublished Master of Education Thesis. Boston, Mass.: Boston University, 1933. (From the San Diego objectives.)

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"To discover, conserve, and develop the especially gifted child, not, however, at the expense of the average pupils in the group or those who have very little aptitude for this subject."^{2/}

The three units.-- A unit was written, taught and tested during the winter of 1944-45. The topic chosen was sculpture, since it was to be taught in Barre, Vermont, one of the leading granite centers in the United States.

The following summer the unit was revised.^{3/} At that time it was impossible to revise the test or to fully develop all of the special study guides and optional related activities.

The unit was again improved, taught and tested during the winter of 1945-46.

The results of the above development are reported in writing, graphs, figures and photographs.

The terminology.-- The terminology used in this thesis is the same as that used in Fundamentals of Secondary-School Teaching.^{4/}

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2/ Thomas Munro and Others, op. cit., p. 812.

3/ The revised unit was part of the requirements for the course: The Unit Method in the Secondary-School. taught by Dr. Roy O. Billett in the Boston University School of Education.

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CHAPTER II
THE UNIT ORGANIZATION OF THE TOPIC, SCULPTURE

The First Unit

The Unit. The student should have:

1. The ability to make something in "the round" in soap and Plasteline.
2. The ability to understand simple, three-dimensional design.
3. The ability to understand and appreciate other carving and modeling materials.
4. The ability to understand and appreciate some of the outstanding sculptors.

Delimitation of the Unit. The student should have:

1. The ability to handle Plasteline, soap, knives and modeling tools.
2. The ability to plan an armature, the foundation for modeling in the round.
3. The ability to draw plans for sculpture.
4. The ability to understand proportion.
5. The ability to increase his understanding of the laws of design as they are applied to line and form.
6. The ability to understand the planes of an object.

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5. The ability to increase his understanding of the laws of design as they are applied to line and form.
6. The ability to understand the planes of an object.

7. The ability to understand how plaster casts are made.
8. The ability to appreciate the sculpture in Barre.
9. The ability to understand the many uses of carving and modeling.
10. The ability to appreciate some of the outstanding sculptors.
11. The ability to understand such terms as bas-relief, full round, heroic, colossal, conventionalized, plaster-of-Paris, rococo, allegorical, cast and mold.

The Unit Assignment.

A. Introductory demonstrations and discussion.

1. Explain that the aims of the study in sculpture are:
 - a. To give everyone the opportunity to model in Plasteline and to carve in soap or any other material that is practical.
 - b. To acquaint us with good sculpture in Barre and elsewhere.
 - c. To give a broad understanding of the processes involved in making statues.
 - d. To acquaint us with some outstanding sculptors.
2. Show pictures which illustrate bas-relief, statues in the round, armatures and tools.

7. The ability to understand how plaster casts are

made.

8. The ability to appreciate the sculpture in Barre.

9. The ability to understand the many uses of carving

and modeling.

10. The ability to appreciate some of the outstanding

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c. To give a broad understanding of the

processes involved in making statues.

d. To acquaint us with some outstanding sculptors.

2. Show pictures which illustrate bas-relief, statues

in the round, armatures and tools.

3. Make drawings of tools and armatures on the black-board.

4. Explain that Plasteline is treated clay which does not become dry. It is antiseptic. It will tarnish silver.

5. If possible, show a movie that demonstrates modeling, armature construction, plaster casting, and bronze casting. (From Clay to Bronze. Harvard Film Service.)

a. A sheet of questions and statements should be studied before the movie is shown.

b. Soon after the movie, the students should be given the opportunity to list as many of the steps as possible. There should be discussion for clarification.

6. Discuss the following questions and statements.

a. What type of support (armature) is needed for a head, a figure, or an animal? What does a tile need?

b. What kind of wire is needed for an armature?

c. How can the wire be fastened to the block?

d. How can the wire be enlarged to make a core?

This will make a larger figure possible.

e. How will you protect the top of your desk?

f. What tools can you make?

3. Make drawings of tools and armatures on the black-

board.

4. Explain that Plastiline is treated clay which does

not become dry. It is antiseptic. It will

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This will make a larger figure possible.

e. How will you protect the top of your desk?

f. What tools can you make?

B. Individual, small group and demonstration work.

1. Find photographs or drawings of animals, costumes or characters that could be studied.

2. Find photographs of sculpture suitable for class study.

3. The teacher should review figure proportion with the class. Make drawings on the blackboard. (front and side view.)



a. The figure has three big divisions that are approximately equal. These are: shoulder to hip, hip to knee, and knee to feet.

b. Elbows should be at the waist, and the hands should fall a little over half-way between the hip and the knee.

c. The adult figure is about seven and a half heads tall.

d. The shoulders are about two heads wide through the largest part of the upper arm.

e. The hips are about one and one-half heads wide.

f. The waist is one head wide. (front view)

g. The body is one head through the widest part

5. The side view.

4. The teacher should review the proportions of the head. Indicate brief skeleton and proportion.

- B. Individual, small group and demonstration work.
1. Find photographs or drawings of animals, costumes or characters that could be studied.
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 - d. The shoulders are about two heads wide through the largest part of the upper arm.
 - e. The hips are about one and one-half heads wide.
 - f. The waist is one head wide. (front view)
 - g. The body is one head through the widest part side view.
 4. The teacher should review the proportions of the head.



Make drawings on the blackboard. (front and side view.)



- a. The head is shaped like an egg. It is divided into four equal parts. These are: top of head to hair line, hair line to eyes, eyes to nose, and nose to chin.

- b. It is three-quarters as wide front view as it is side view.

- c. A man's eyes are just above the center; a woman's eyes are below the center; and a baby's eyes are on the center.

- d. The width of the end of man's nose equals the width of his eye.

- e. A baby's nose is smaller than the width of his eye.

- f. A negro's eye is wide and the end of his nose is wider.

- g. See diagrams on sheets for Modeling A Head for other equal parts.

- h. One third of the face, from the top of the nostril to the chin, equals the distance from the chin to the breast bone.



5. The teacher should make drawings of at least one animal on the blackboard.

- a. Indicate brief skeleton and proportion.

Make drawings on the blackboard. (front and side

view.)

a. The head is shaped like an egg. It is divided

into four equal parts. These are: top of

head to hair line, hair line to eyes, eyes

to nose, and nose to chin.

b. It is three-quarters as wide front view as

it is side view.

c. A man's eyes are just above the center; a

woman's eyes are below the center; and a

baby's eyes are on the center.

d. The width of the end of man's nose equals

the width of his eye.

A baby's nose is smaller than the width of

his eye.

e. A negro's eye is wide and the end of his

nose is wider.

f. See diagrams on sheets for Modeling A Head

for other equal parts.

g. One third of the face, from the top of the

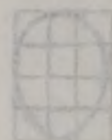
nostril to the chin, equals the distance

from the chin to the breast bone.

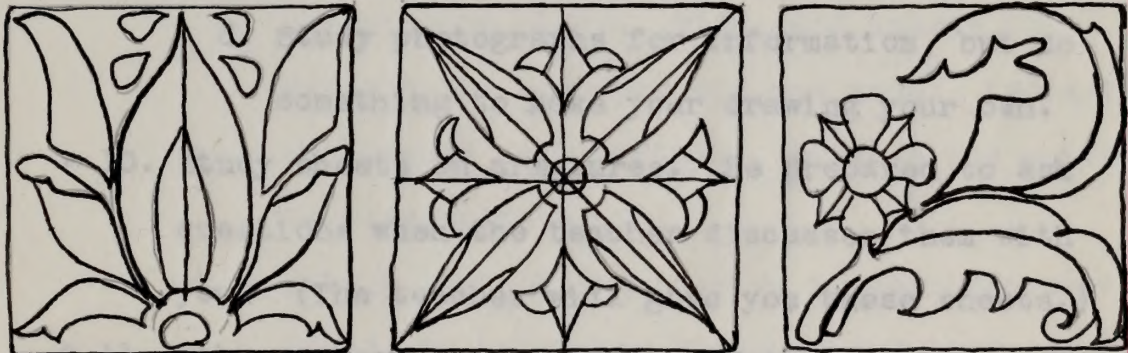
5. The teacher should make drawings of at least

one animal on the blackboard.

6. Indicate brief skeleton and proportion.



- b. Draw several positions.
 - c. Draw details of head and legs in front and side view positions.
6. The teacher should divide several squares on the blackboard to indicate that:
- a. The design may be balanced, (axial, central or free.)
 - b. In free balance the space is divided unevenly.
- The main lines are above or below the center or to the right or left of the center.
- c. The type of line used within the shape should be consistent.
 - d. The design should fit the shape.
 - e. The subject matter should be suitable.



* 7. Make diagrams of the blackboard drawings.^{1/}

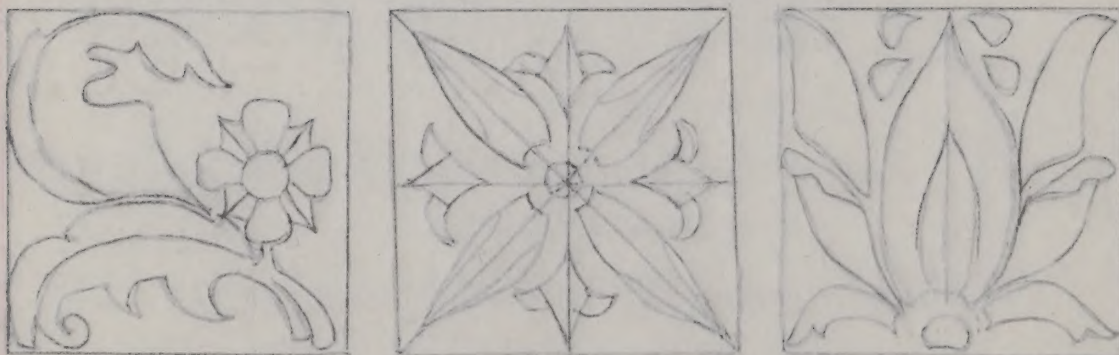
* 8. The teacher and class will list on the black-

^{1/} The asterisk means that this appears on the pupil's Study and Activity Guide.

* 13. Cover the desk with newspaper while modeling.

- d. Draw several positions.
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- a. The design may be balanced, (axial, central or free.)
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- * 7. Make diagrams of the blackboard drawings. ^{1/}
- * 8. The teacher and class will list on the black-
- ^{1/} The asterisk means that this appears on the pupil's Study and Activity Guide.

- board the possible figures, animals, and ideas for tiles that could be used to illustrate the history and geography that are being studied.
- * 9. Select a figure, an animal or a tile subject.
- * 16. Draw front, side and back views of an animal or a figure. Draw the top and side views of a tile.
 - a. Measure and draw rectangles in which to draw the figures, animals or tiles.
 - * 17. b. Draw a line through the vertical center of each view. Keep the figures reasonably symmetrical.
 - * 18. c. A base would be necessary on the figure and the animal if they were to be cast. Otherwise the block of wood may be considered the base.
 - d. Study photographs for information, but do something to make your drawing your own.
- * 10. Study sheets on armatures. Be prepared to ask questions when the teacher discusses them with you. (The teacher will give you these sheets.)
- * 11. Make or have your father make an armature.
- * 12. Break the Plasteline into small pieces and roll between both hands. Soften as much as you will need for one period and begin to apply it as indicated in the sheets for modeling.
- * 13. Cover the desk with newspaper while modeling.

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- * 12. Break the Plasteline into small pieces and roll between both hands. Rollen as much as you will need for one period and begin to apply it as indicated in the sheets for modeling.
- * 13. Cover the desk with newspaper while modeling.

- * 14. Prepare at home some modeling sticks from wood and wire.
- * 15. Keep Plasteline in lumps about 2" x 2 $\frac{1}{2}$ ". Avoid small crumbs on your desk.
- * 16. Gather all Plasteline together at the end of the period. Wrap in waxed paper. Place your name on a piece of paper in the package and place it with your work.
- * 17. The teacher will give you sheets for modeling.
- * 18. For further work choose one of the following art activities:

a. You and two others plan a table exhibit of carved or molded objects.

Be sure to ask each one who loans an object to label it with adhesive tape in some inconspicuous place. Plan card labels to explain how each article was made. Indicate who loaned each article. Arrange the exhibit to have balance.

b. Make a list of twenty-five of the important monuments in either Elmwood or Hope Cemetery. Each monument should be outstanding for line, lettering or sculpture. Letter the list. Indicate the name of the monument, the description, location, the cemetery. Two students could work together on this (fifty

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names). DO NOT WALK ON THE GRAVES OR RUN IN THE ROADS.

- c. Model a small object such as a rabbit, a mouse, a fish, a squirrel, etc. Make a plaster of Paris mold of it and cast it.
- d. Make a paper and wire animal.
- e. Model some article in kneaded soap. Ask the teacher for the article in the School Arts Magazine.
- f. Make a large drawing on wrapping paper of any one of the following. Ask the teacher for Bridgeman's Constructive Anatomy.

(1) The skeleton front view and side view.

Divide it into head measurements.

The figure will be outlined in black and the measurements.^{1/}

(2) The figure side view showing the direction of the chest, back, pelvis, upper leg, and lower leg. Draw and shade the figure in black. Draw a red line from ear to ankle bone.
p. 13.

(3) Draw bone construction of arm, p. 71, and muscles, p. 73. Draw the arm in

^{1/} George B. Bridgeman, Constructive Anatomy. Pelham, N.Y. pp. 155, 162, 176, 182, 188.

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George B. Bridgman, Constructive Anatomy, Pelham, N.Y.
pp. 125, 126, 127, 128, 129.

- * 22. Discuss material black and the bone in red. Make large, fresh numbers in black. p. a paring knife, small pe (4) Draw the arm. p. 103. (in black) (sodium (5) Draw either the neck, p. 109, or the newspaper, neck p. 111 (black).

23. Review (6) Draw either the head p. 122, or the Discuss the head p. 127. (black). and bas-reliefs.

* 19. Optional Activities. 44" x 28", 18" x 48", 48" x

- a. Draw a series of diagrams that will show how lines a sculptor makes a stone figure. angle to help
b. Write a report on the uses of sculpture.

- * 25. Select Ask the teacher for additional information back if you cannot find enough.

- c. Draw diagrams of armatures for special arms again animals. Label them and give exact dimensions. These are for the file. If the figure had d. Mount pictures provided by the teacher.

- If it There should be a smaller margin at the top 1" on and sides than at the lower edge. Letter a the brief description on the back of the mount. Avoid These are for the school file. too much

20. The teacher will give a multiple choice test on

- * 26. sculpture. (50 questions). ing by Lester Gaba.

21. The teacher will give a brief quiz on soap sculp-

- * 27. ture to discover present knowledge. in even

black and the bone in red. Make

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sculpture. (50 questions).

21. The teacher will give a brief quiz on soap sculp-

ture to discover present knowledge.

- * 22. Discuss materials required for soap sculpture:
 large, fresh cake of Ivory Soap, a paring knife,
 small pen knife or some similar tool, water glass
 (sodium silicate), common pins, several sheets of
 newspaper, and a paper bag.
- 23. Review figure proportion and head proportion.
 Discuss the skeletons of animals and bas-reliefs.
- * 24. Draw three rectangles $4\frac{1}{2}" \times 2\frac{1}{2}"$, $1\frac{1}{2}" \times 4\frac{1}{2}"$, $4\frac{1}{2}" \times 2\frac{1}{2}"$ on 6" x 9" arithmetic paper. Draw verticle lines through the center of each rectangle to help to keep the drawing symmetrical.
- * 25. Select your subject. Draw the front, side, and back views in the rectangles.
 If it is a figure, make it simple. Draw the arms against the body. The legs should touch each other or have some support between. If the figure has legs allow a $\frac{1}{2}"$ base.
 If it is an animal with standing legs, plan for a $\frac{1}{4}"$ base and a partition under the body and between the two sets of legs.
 Avoid complicated designs which have too much detail.
- * 26. Read pp. 10-32 in Soap Carving by Lester Gaba.
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the two sets of legs.
Avoid complicated designs which have too much
detail.
- * 26. Read pp. 10-32 in Soap Carving by Lester Gaba.
Study pictures.
- * 27. A fresh cake of white soap that has an even

texture is best. Large size Ivory has only small notches compared to Swan's large cut.

Good home-made soap is all right if you have it.

Rectangular soap is best to carve.

- * 28. Mend a small hole. Moisten and mix shavings of soap until pasty. Press into hole and allow to dry. Smooth the rough surface later.
- * 29. Join two pieces of soap. Carve parts of sculpture separately. Spread the two surfaces to be joined with a solution of sodium silicate and press quickly together. If the pieces are large, press common pins diagonally across the join. Do this from either side, but do not press the pins too closely together.
- * 30. Smooth off all lettering, projecting edges and corners with your knife. Do not slice them.
- * 31. GO SLOWLY. Soap cuts easily and it is difficult to mend.
- * 32. Brace your thumb against the soap just as you would if you were paring fruit. Don't hold the paring knife like a pen or pencil. This is permissible only when you are scoring a line for a sharp edge.
- * 33. Never cut away from you. You will have no control over the knife. It is very apt to slip and ruin your carving.

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- * 34. Allow for projections such as tails, ears, etc. from the start. Outline them with the tip of your knife, and cut away from them as you progress with the body of the figure.
- * 35. Scoring. Cutting straight into the soap with the tip of your knife will define the edges of projections.
- * 36. Pare away the unwanted soap.
- * 37. Carve the soap gradually, turning it over frequently to see it from all angles. Compare it often with the model or the drawings that you are following.
- a. Begin to find the planes.
- b. Observe that the head is much smaller than the body.
- c. Often the shoulders are the widest part of a figure.
- d. The lower edge of a skirt is often as full as the cake of soap will allow.
- * 38. Leave the carved detail of the projections until last.
- * 39. A pen knife is good for making small details.
- * 40. Poster or opaque water colors may be used on soap.
- * 41. A thin coating of transparent lacquer will protect soap. Two thin coats will permit gentle washing.

- * 34. Allow for projections such as tails, ears, etc. from the start. Outline them with the tip of your knife, and cut away from them as you progress with the body of the figure.
- * 35. Scoring. Cutting straight into the soap with the tip of your knife will define the edges of projections.
- * 36. Remove the unwanted soap.
- * 37. Carve the soap gradually, turning it over frequently to see it from all angles. Compare it often with the model or the drawings that you are following.
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- * 42. Soap carving has been used for window decoration, room ornaments, and bath soap. See pages 40-80 for the many ways in which Mr. Gaba has used soap.
- * 43. Bath soaps are made from soft soap that has been poured into molds that were cast from carved soap. There is usually a ridge around the center of molded soaps.
- * 44. Soap carving and modeling in Plasteline help us to see more clearly the planes to be found in all three dimensional objects.
- * 45. Soap carving has been mistaken for wax work.
- * 46. Carving in ivory and bone is similar to soap carving. Where would we see ivory and bone carving?
- * 47. Choose one of the following activities:
 - a. Form a committee of three and arrange a table exhibit which will include pictures or objects (not shown before) of bone, ivory, shell, plastic, soap, plaster, and wood carving. Letter explanations. Use the National Geographic, Compton's Pictorial Encyclopedia and any other book that may be borrowed. Elastic bands are often used to hold pages open.
 - b. Mount pictures provided by the teachers. Letter information on the back of the mount.

17
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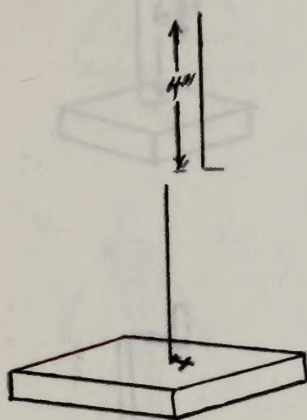
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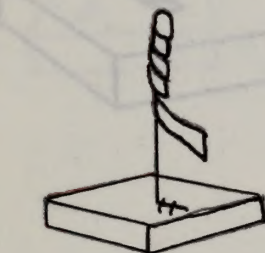
Letter information on the back of the mount.

Special Study and Activity Guides

Materials required: Armature for a Head

Materials required: a block of wood about $4\frac{1}{2}$ " x 1" x $4\frac{3}{4}$ "

coat hanger wire, or copper wire of the same gauge. Galvanized wire may be used if it is painted with Brunswick Black. Wire staples, or nails, a pair of wire snips, a metal file, a hammer, paper towels, scissors, and gummed tape.



1. Cut the wire and file the ends.
2. Bend the wire at right angles $\frac{3}{4}$ " from one end.
3. Fasten this end firmly to the block with the staples or the nails.



4. Cut paper in $\frac{1}{2}$ " strips and wind tightly around the wire. Fasten the loose ends with the tape.
5. Add as much towel as possible and yet keep within the narrowest widths of the proposed head.

About one-third of the total width of the neck is a good thickness.

Special Study and Activity Guides

Apparatus for a Head

Materials required: a block of wood about $4\frac{1}{2}$ " x $1\frac{1}{2}$ " x $3\frac{1}{4}$ "

coat hanger wire, or copper wire of the same gauge. Galvanized wire may be used if it is painted with Brunswick Black. Wire staples, or nails, a pair of wire snips, a metal file, a hammer, paper towels, scissors, and gummed tape.

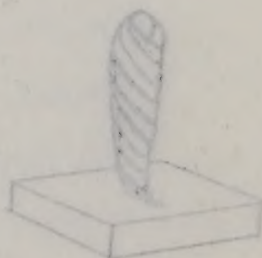
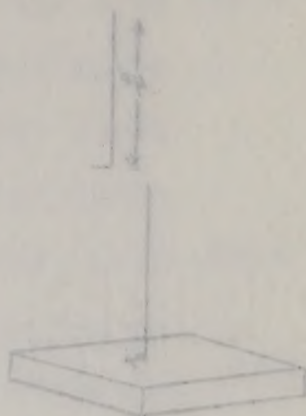
1. Cut the wire and file the ends.
2. Bend the wire at right angles $3\frac{1}{4}$ " from one end.

3. Fasten this end firmly to the block with the staples or the nails.

4. Cut paper in $1\frac{1}{2}$ " strips and wind tightly around the wire. Fasten the loose ends with the tape.

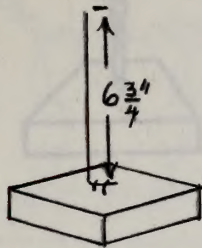
5. Add as much towel as possible and yet keep within the narrowest

widths of the proposed head. About one-third of the total width of the neck is a good thickness.

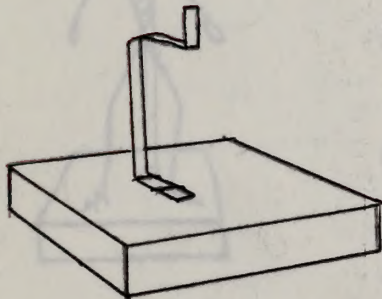


Armatures for a Figure

Materials required: These should be the same as the above except in amount. A larger block may be desirable 1" x 5½" x 5½". If the figure is to have free arms and legs, separate pieces of wire will be needed for these. Extra wire may be needed for binding the parts together.



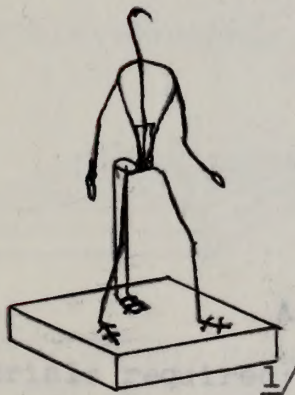
Solder may be used.



1. Consult your drawings for proportions.

2. A straight figure with its arms placed against the body and its legs close together can have a single stiff wire like that of the head armature.

3. The wire should be 7½" long. Bend the wire at right angles ¾" from one end. The finished support will be 6-¾" tall.



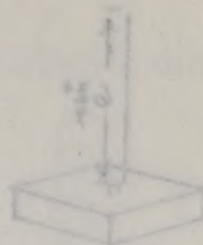
4. Finish wire and fasten to the block as in 1 and 3 above. (For A Head)

5. If the arms and legs are to be free, then separate wires for them

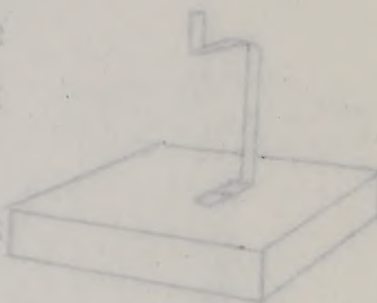
1/ F. J. Glass, Modeling and Sculpture. London: B. T. Batsford, Ltd., 94 High Holborn, 1929. P. 11.

Armatures for a Figure

Materials required: These should be the same as the above except in amount. A larger block may be desirable $1" \times 5\frac{1}{2}" \times 5\frac{1}{2}"$. If the figure is to have free arms and legs, separate pieces of wire will be needed for these. Extra wire may be needed for binding the parts together.



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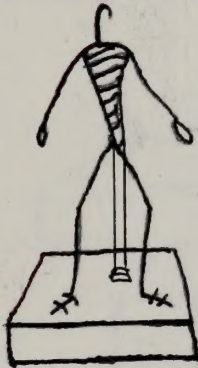
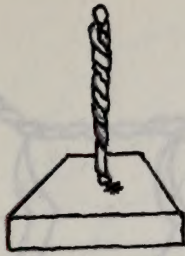


2. A straight figure with its arms placed against the body and its legs close together can have a single stiff wire like that of the head armature.

3. The wire should be $7\frac{1}{2}"$ long. Bend the wire at right angles $5\frac{1}{4}"$ from one end. The finished support will be $6-5\frac{1}{4}"$ tall.



4. Finish wire and fasten to the block as in 1 and 3 above. (For a Head)
5. If the arms and legs are to be free, then separate wires for them



must be cut to the right lengths and bound to a stiff wire for a support.

A. These wires can be bent to suit the position.

B. Allow enough wire to fasten the legs to the block.

C. The complete wire figure should not be more than $6\frac{3}{4}$ " from the block.

6. The completed modeled figure will be $7\frac{1}{2}$ " high. (With Plasteline).

7. Cut paper in $\frac{1}{2}$ " strips and wind it tightly on the wire where it will save the most Plasteline. Be careful that it does not interfere with the narrowest widths of the figure. The wire can be wound to one-third of the proposed completed thickness.

Armature for an Animal

Materials required: These should be about the same as those required for the figure. Most animals need a larger block of wood; about $7\frac{1}{2}$ " x $4\frac{1}{2}$ " x 1" will do.

must be cut to the right lengths
and bound to a stiff wire for a
support.

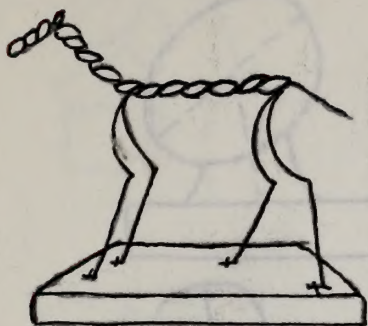
- A. These wires can be bent to
suit the position.
- B. Allow enough wire to fasten
the legs to the block.
- C. The complete wire figure
should not be more than 6-3/4"
from the block.



- D. The completed modeled figure will
be 7 1/2" high. (With Plasteline).
- E. Cut paper in 1/2" strips and wind
it tightly on the wire where it
will save the most Plasteline. Be
careful that it does not interfere
with the narrowest width of the
figure. The wire can be wound to
one-third of the proposed completed
thickness.

Armature for an Animal

Materials required: These should be about the same as
those required for the figure. Most
animals need a larger block of wood;
about 7 1/2" x 4 1/2" x 1" will do.

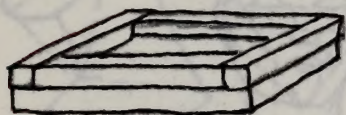


1. The wire must be cut and bent exactly to correspond to the head, neck, back, legs and tail.
2. Be sure that the wire is twisted firmly.
3. Allow enough wire ($3/4$ ") on the ends of the legs to fasten them to the base.
4. "Galvanized wire of 17, 18, or 19 gauge may be used if twisted double."^{1/}
5. "The legs must be joined firmly and twisted snugly along side the corresponding strands of the skeleton."

2/

Armature for a Tile

Materials required: $5\frac{1}{2}$ " x $5\frac{1}{2}$ " x 1" wooden block, four battons (or strips of wood) two of the strips will be $5\frac{1}{2}$ " x $\frac{1}{4}$ " x $\frac{1}{4}$ ", and two of the strips will be 5" x $\frac{1}{2}$ " x $\frac{1}{2}$ ".



1. "Nail battons to the board."^{3/}

^{1/} Clifford and Rosemary Ellis, Modeling for Amateurs. New York: The Studio Publications, Inc., 381 Fourth Ave., 1944, p. 11.

^{2/} Ibid., p. 62.

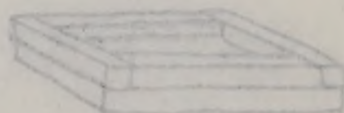
^{3/} F. J. Glass, op. cit., p. 53-56. p. 19-20.

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2. Be sure that the wire is twisted firmly.
3. Allow enough wire ($3\frac{1}{4}$ " on the ends of the legs to fasten them to the base.
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Armature for a Tile

- Materials required: $5\frac{1}{2}$ " x $5\frac{1}{2}$ " x 1" wooden block, four battens (or strips of wood) two of the strips will be $5\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ ", and two of the strips will be 5" x $\frac{1}{2}$ " x $\frac{1}{2}$ ".
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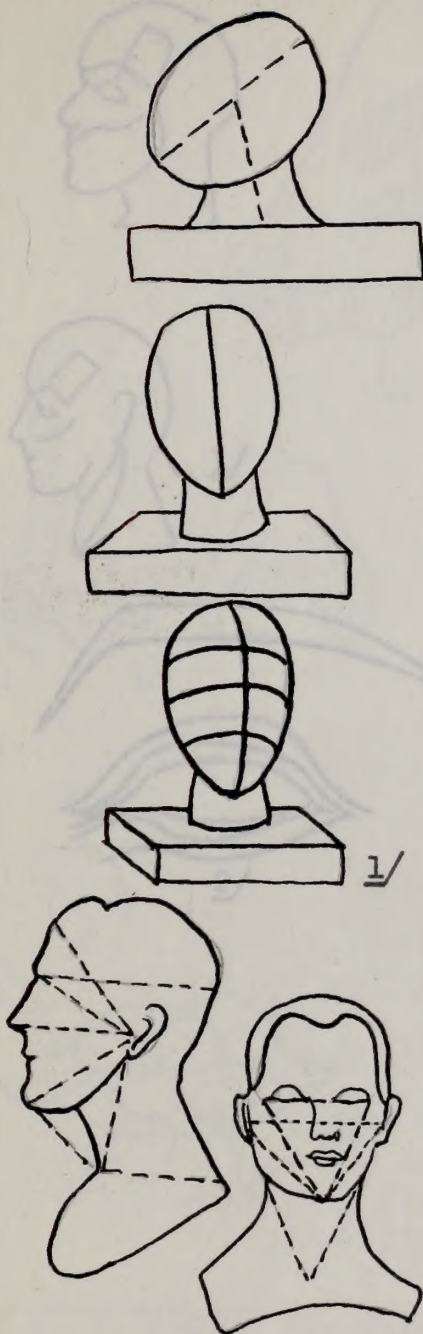


1/ Clifford and Rosemary Ellis, Modeling for Amateurs. New York: The Studio Publications, Inc., 361 Fourth Ave., 1944, p. 11.

2/ Ibid., p. 62.

3/ F. J. Glass, op. cit., p. 53-56.

Modeling A Head



1. Roll Plasteline until it is soft enough to mold.

2. The head should be tilted at an angle.^{1/}

3. A. The neck seems to tip on forward, the head seems to tip backward.

3. Shape the head like an egg.

4. Make it a little smaller than the completed form is to be.

5. A. If it is to be cast, make a $\frac{1}{4}$ " or $\frac{3}{8}$ " base.

6. Draw a line in the center of the egg and be sure that the shape is evenly balanced on either side.

7. Divide the head into fourths.

8. See diagrams for parts that are equal.

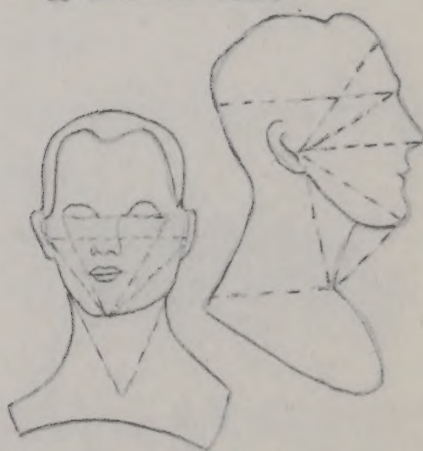
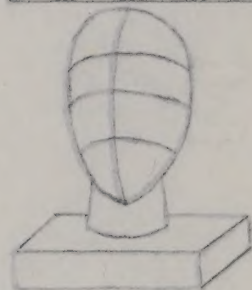
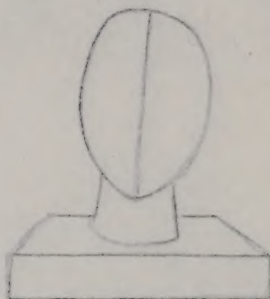
9. Begin to build the forehead, cheekbones, the beginning

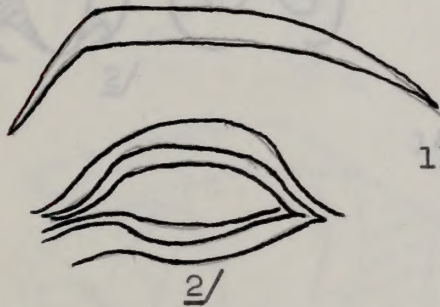
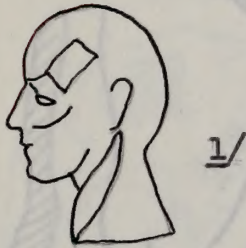
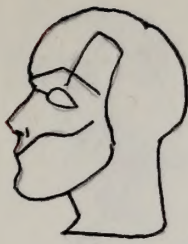
^{1/} F. J. Glass, *Modeling and Sculpture*. London: B. T. Batsford, Ltd., 94 High Holborn, 1929. p. 19-20.

^{2/} *Op. cit.*, p. 21.

Modeling A Head

1. Roll Plasteline until it is soft enough to mold.
2. The head should be tilted at an angle.
3. The neck seems to tip forward, the head seems to tip backward.
4. Shape the head like an egg. Make it a little smaller than the completed form is to be.
5. If it is to be cast, make a $\frac{1}{2}$ " or $\frac{3}{8}$ " base.
6. Draw a line in the center of the egg and be sure that the shape is evenly balanced on either side.
7. Divide the head into fourths. See diagrams for parts that are equal.
8. Begin to build the forehead, cheekbones, the beginning





of the nose, the jaw and the ear. Leave hollows for the eyes.

8. Study pictures and study yourself and your friends.
9. Lay a roll of Plasteline on either side of the neck from behind the ear to the top of the breast bone.
10. "Roll balls of Plasteline and place them within the eye sockets."^{1/}
11. "The eyelids should be laid over the eye as flat pieces of Plasteline.
 - A. They should be slightly thicker than in nature because the lashes in the upper lid help to cast a deeper shadow, while those on the lower lid tend to broaden the light caught by the edge."^{2/}

^{1/} F. J. Glass, op. cit., p. 21.

^{2/} Op. cit., p. 21.

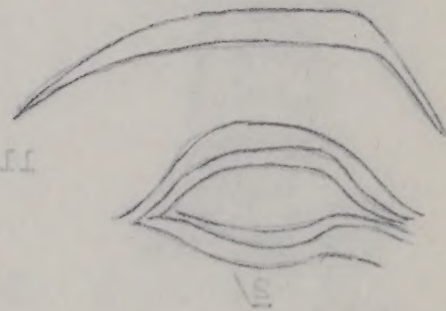
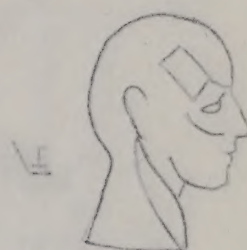
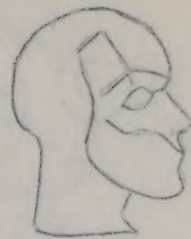
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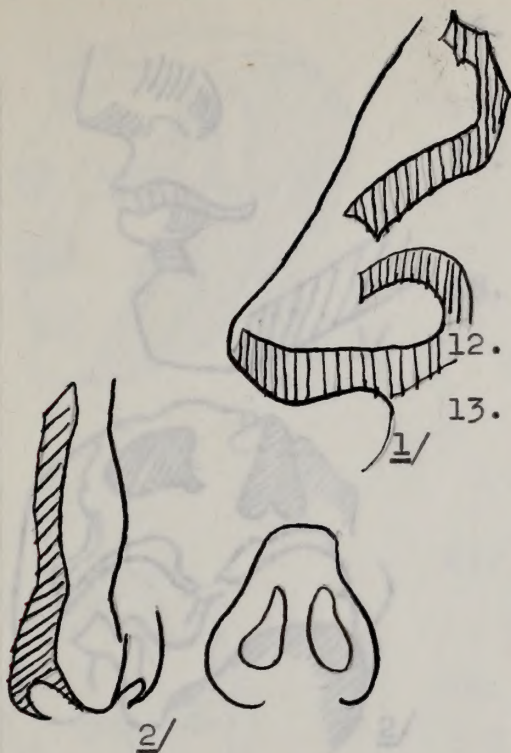
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IV. F. J. Glass, op. cit., p. 21.

2/ Op. cit., p. 21.



B. The lower lid is straighter than the upper lid.

C. The inner corners of the eye are lower than the outer corners.

12. Add the eyebrows.

13. The nose consists of the fleshy tip and the two wings of the nostrils. There is a plane on the end of the nose. The nose is made of cartilage and bone.

14. Build the area beneath the nose. Feel the arch of your own upper jaw through the upper lip.

15. The lips are thicker toward the center. The upper lip consists of three lobes.

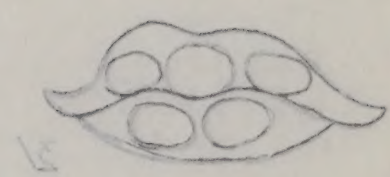
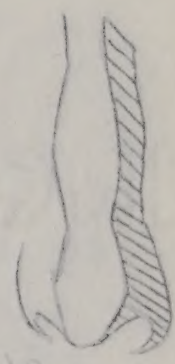
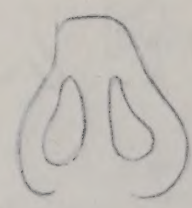
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1/ F. J. Glass, op. cit., p. 19.

2/ Ibid.

3/ Ibid.

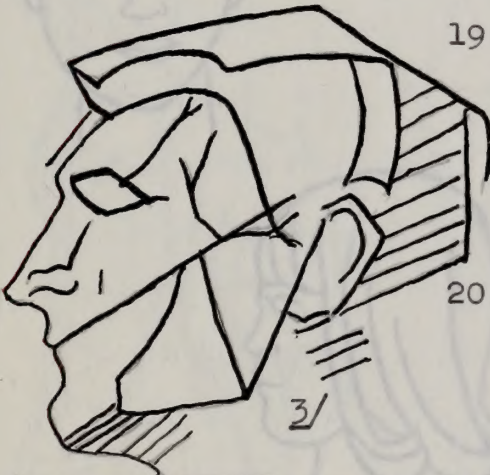
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1/ F. J. Glass, op. cit., p. 19.

2/ Ibid.

3/ Ibid.



16. Study the curves directly above and below the lips.
17. Study the shape of the jaw line. It is like a horseshoe.
18. Study the shapes and planes on the arches directly in front of the ears and above the angle of the jaw. This is the widest part of the face. Notice the depressions directly below the arches. Study your neighbor.
19. Add ears. Try to get a good shape and size. The position that is in line with the jaw is important.
20. Study the main masses of the hair. Observe where it projects and where it almost

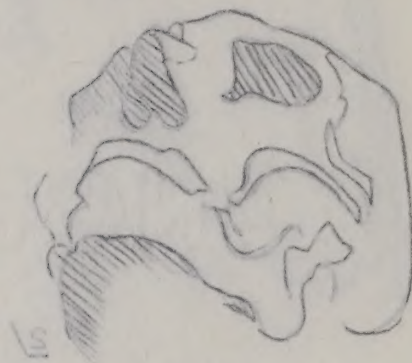
1/ George Bridgeman, Constructive Anatomy, p. 147. Pelham, New York: Bridgeman Publishers, 1929.

2/ Ibid., p. 127.

3/ Ibid., p. 127.

1/ George Bridgeman, op. cit., p. 127.

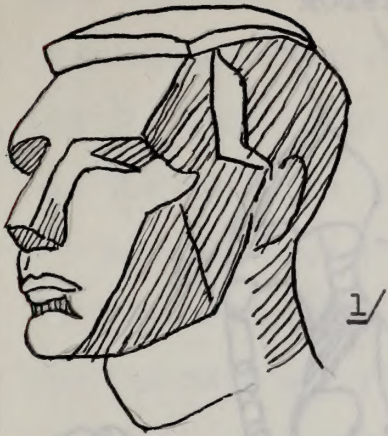
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George Bridgman, Constructive Anatomy, p. 147, Pelham, New York: Bridgman Publishers, 1929.

2/ Ibid., p. 127.

3/ Ibid., p. 127.



blends with the skin.

21. The texture is best suggested at the overlapping edges of the masses.

22. Break the masses with a few carefully drawn lines at well chosen parts. Don't scratch over the whole surface.

23. Spread a thin film of Plasteline over the surface.

24. When you are home, draw the head in every possible position.



4. Add more Plasteline to shoulders, chest, hips and waist.

A. Study the planes indicated in the diagram.

B. Study similar planes on yourself and on your neighbors.

1/ George B. Bridgeman, *Constructive Anatomy*, p. 13. Pelham, New York: Bridgeman Publishers, 1928.

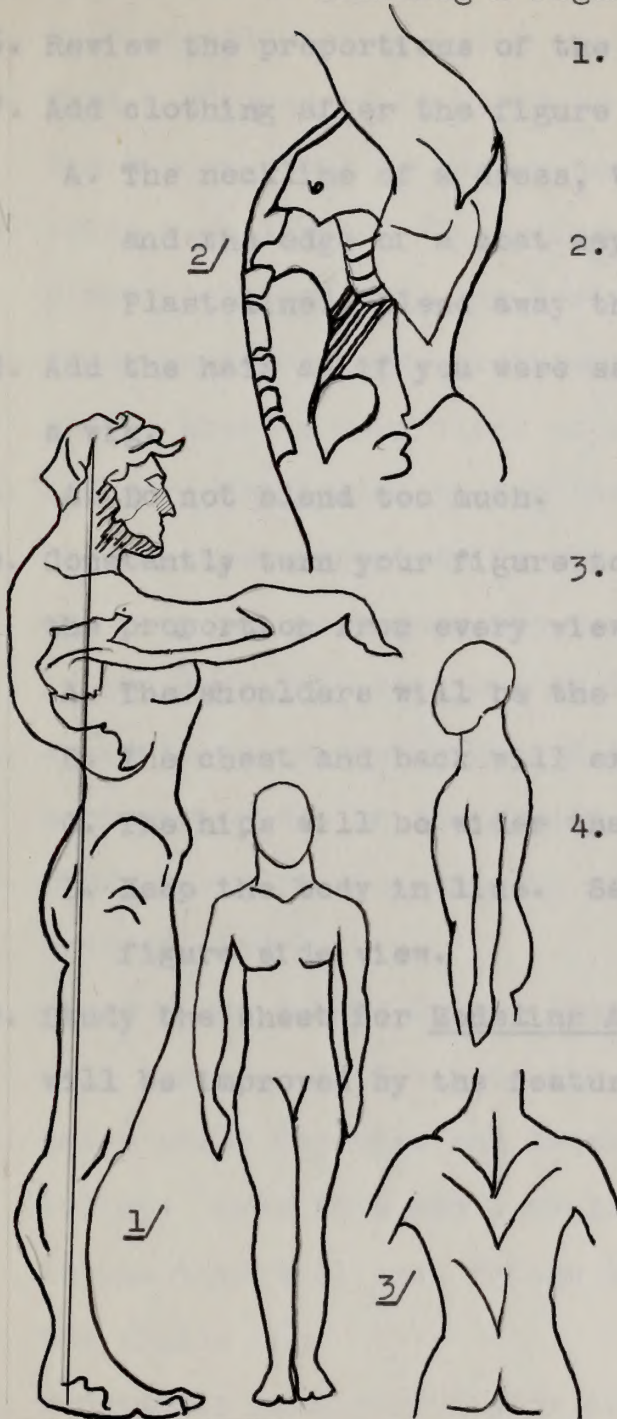
1/ George Bridgeman, op. cit., p. 127.

2/ Ibid., p. 153, 156 (adapted)

- blends with the skin.
21. The texture is best suggested at the overlapping edges of the masses.
22. Break the masses with a few carefully drawn lines at well chosen parts. Don't scratch over the whole surface.
23. Spread a thin film of flateline over the surface.
24. When you are home, draw the head in every possible position.



Modeling A Figure



1. Roll the Plasteline until it is soft enough to mold.

2. Make a $\frac{1}{2}$ " base $3\frac{1}{2}$ " x $7\frac{1}{2}$ " if the figure is to be cast, otherwise consider the wooden block to be the base.

3. Press each lump of Plasteline firmly on the armature, blending each lump with the last.

4. Add more Plasteline to shoulders, chest, hips and waist.

A. Study the planes indicated in the diagram.

B. Study similar planes on yourself and on your neighbors.

1/ George B. Bridgeman, Constructive Anatomy, p. 13. Pelham, New York: Bridgeman Publishers, 1928.

2/ Ibid., p. 163 (adapted)

3/ Ibid., p. 165, 166 (adapted)

Modeling A Figure

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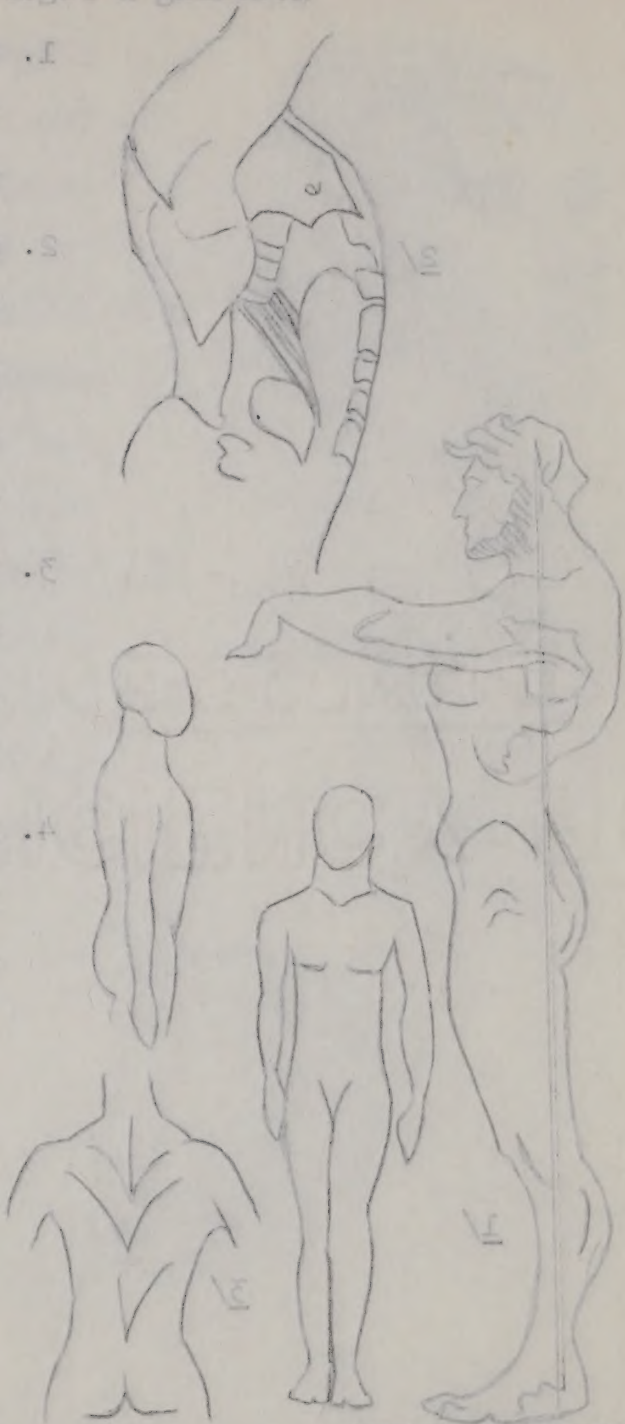
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2/ Ibid., p. 163 (adapted)

3/ Ibid., p. 165, 166 (adapted)

5. Make the head egg shaped and tilt it at an angle.^{1/}
6. Review the proportions of the figure.
7. Add clothing after the figure has been partly modeled.
 - A. The neckline of a dress, the fold of a garment, and the edge of a coat may be added as a roll of Plasteline. Blend away the unnecessary material.
8. Add the hair as if you were sewing sections of it to a wig.
9. A. Do not blend too much.
9. Constantly turn your figure to study the planes and the proportion from every view.
 - A. The shoulders will be the widest part.
 - B. The chest and back will extend beyond the arms.
 - C. The hips will be wider than the waist.
 - D. Keep the body in line. See diagram for center of figure side view.
10. Study the sheet for Modeling A Head if your figure will be improved by the features.
11. Leave holes for eyes and later add a small ball of Plasteline. Over this add a small, flattened piece of Plasteline that will just bridge the gap between the eye and the skull.
12. Constantly turn your figure and study the planes and

^{1/} F. J. Glass, Modeling and Sculpture. London: B. T. Batsford. LTD., 94 High Holborn, 1929. PP. 19-20.

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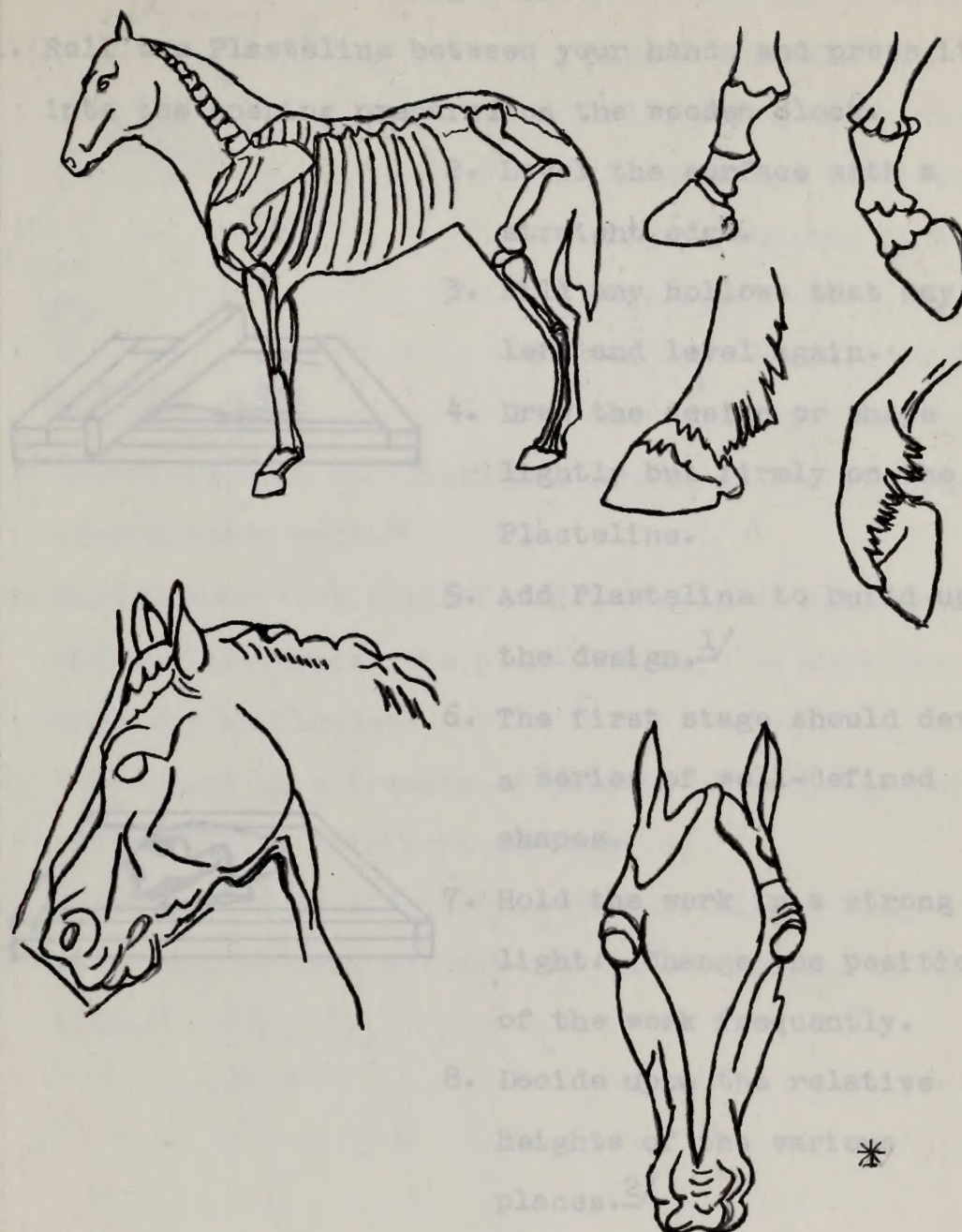
Modeling An Animal

1. Roll the Plasteline until it is soft enough to mold.
2. Make a $\frac{1}{4}$ " base if it is to be cast, otherwise consider the wooden block to be the base.
3. Press each lump of Plasteline firmly on the armature. Blend each lump with the last lump.
4. Study your drawings, pictures, and photographs. These should show as many views as possible.
5. Add more Plasteline to the shoulders and hips.
6. Observe where the body is the smallest.
7. How does the neck join the body?
Is the neck thin at the back-bone or is it round?
8. Where is the widest width of the skull? Where is the narrowest width of the skull?
9. Study the direction and the shape of the planes of the head and body.
10. Observe the joints in the legs. How do the muscles help the legs to fit into the body?
11. Leave holes for eyes and later add a small ball of Plasteline. Over this add a small, flattened piece of Plasteline that will just bridge the gap between the eye and the skull.
12. Constantly turn your figure and study the planes and the proportions from every view.

* Tracings were taken from a book in the Boston Public Library in 1928. I have tried to locate the book.

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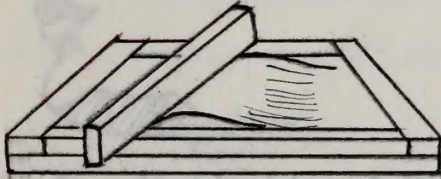
2/ 1913., p. 56.



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Modeling A Tile

1. Roll the Plasteline between your hands and press it into the opening prepared on the wooden block.



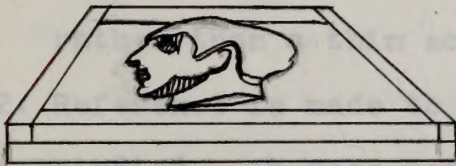
2. Level the surface with a straight edge.

3. Fill any hollows that may be left and level again.

4. Draw the design or shape lightly but firmly on the Plasteline.

5. Add Plasteline to build up the design.^{1/}

6. The first stage should develop a series of well-defined shapes.



7. Hold the work in a strong light. Change the position of the work frequently.

8. Decide upon the relative heights of the various planes.^{2/}

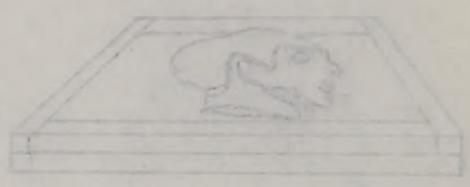
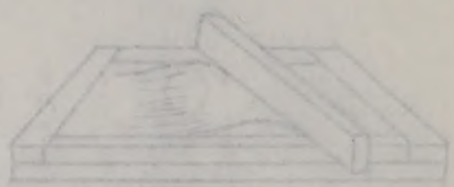
A. For example, the ear will project beyond the planes of the cheek and hair.

^{1/} F. J. Glass, Modeling And Sculpture. London: B. T. Batsford, LTD., 94 High Holborn, 1929. p. 53.

^{2/} Ibid., p. 56.

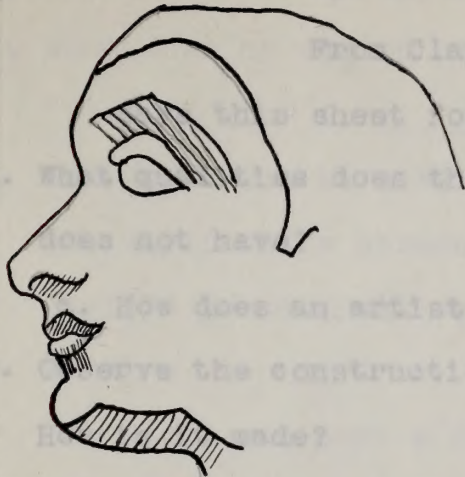
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I. F. J. Glass, Modeling And Sculpture. London: B. T. Sateford, LTD., 94 High Holborn, 1929. p. 53.

Ibid., p. 56.



Questions to be kept in mind while The cheek and brow are higher than the eye, below which again come the nose and other planes sloping between to blend them together.

2. Observe the construction of B. The line of the jaw is above the neck and throat.

9. The final skin of Plasteline should be softer than the part already made.^{1/}

10. Spread this last skin of Plasteline over the work without disturbing the planes beneath so that the work may be blended.

11. There must be a breadth of surface between the forms rather than a thin scratchy hollow.

12. Reference is made to a head because it has been studied. It does not have to be the subject of the tile.

a. Could you make some similar to these?

b. Think of materials that everyone can have, such as penholders, heavy wire, hair pins, etc.

c. Make drawings at home or construct some tools and bring them to school.

3. Study the artist's stand.

^{1/} F. J. Glass, op. cit., p. 57.

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title.

Questions to be kept in mind while seeing the movie--?

5. What does he do? From Clay to Bronze?

-Save this sheet for the next art lesson-

1. What qualities does the clay have that our Plasteline does not have?
2. a. How does an artist keep his clay moist?
2. Observe the construction of the armature (foundation).
How is it made?
3. How does the artist build his statue? If you have modeled, compare this with your method.
4. Study how the artist adds detail. Would you have done it the same way?
5. How does he make sure that he has the planes correct?

-
1. What are his tools?
 - a. If they are not named, try to remember their shape.
 - b. Draw a picture of them as soon as you can.
 2. Observe the special use of each tool.
 - a. Could you make some similar to these?
 - b. Think of materials that everyone can have, such as penholders, heavy wire, hair pins, etc.
 - c. Make drawings at home or construct some tools and bring them to school.
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 - a. Why is it especially useful to him?

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3. Study the artist's stand.

a. Why is it especially useful to him?

4. Where is the source of light? How much is there of it?

5. What does he use to help him measure?

1. What material is used for the mold?

a. Why is this chosen?

2. Explain how a shell or statue with an empty center is made.

a. Could you make a diagram that would explain it?

3. What material is used for the outer mold?

4. What does the artist do to finish the metal?

5. The price of a statue pays for what?

a. Make a list of the steps and the people included.

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Sculpture

All of the omitted words or phrases appear in the column at the left of the page. Show that you know which word or phrase has been omitted from each blank by putting the number of the blank in the proper parentheses at the left. For example, 3 is placed in front of the word omitted from blank three.

() six

(3) one

() seven

() four units

(5) three

() four

(4) three units

(2) two

() eight

(1) five

() hair

(2) three-fourths

(4) egg

(1) four

() ball

() one-half

(5) eyes

(3) above

() three

() below

One might place the length of 1____ eyes across the widest part of the head.

The shoulders are 2____ units of measure wide.

The waist is 3____ unit of measure wide.

It is 4____ of measure from the top of the head to the waist.

The figure is divided into approximately 5____ equal parts.

The head is divided into 1____ parts.

It is 2____ as wide front view as it is side view.

A man's eyes are just a little 3____ the center.

The head is 4____ shaped.

The nose is half-way between the 5____ and the chin.

Sculpture

All of the omitted words or phrases appear in the column at the left of the page. Show that you know which word or phrase has been omitted from each blank by putting the number of the blank in the proper parentheses at the left. For example, 3 is placed in front of the word omitted from blank three.

One might place the length of 1 _____ eyes across the widest part of the head.

The shoulders are 2 _____ units of measure wide.

The waist is 3 _____ unit of measure wide.

It is 4 _____ of measure from the top of the head to the waist.

The figure is divided into 5 approximately 2 _____ equal parts.

The head is divided into 6 _____ parts.

It is 7 _____ as wide from view as it is side view.

A man's eyes are just a little 8 _____ the center.

The head is 9 _____ shaped.

The nose is half-way between 10 the 5 _____ and the chin.

() six

(3) one

() seven

() four units

(2) three

() four

(4) three units

(2) two

() eight

(1) five

() half

(2) three-fourths

(4) six

(1) four

() half

() one-half

(2) eyes

(3) above

() three

() below

-2-1/

All of the omitted words or phrases appear in the column at the left of the page. Show that you know which word or phrase has been omitted from each blank by putting the number of the blank in the proper parentheses at the left.

(1) support^{2/}

10 One makes an armature to
1 ____ the clay.

(4) wooden lathes

We made a paper core for
our statues because we
wished to 2 ____ the clay
that we had to use.

(2) increase

(5) screening

11 If the statue is to have
free arms and legs, it
will need more 3 ____ on
the armature.

() proportion

() strengthen

() clay

Armatures for heroic
(larger than life-size)
13 statues are often made of
14 4 ____ and 5 ____.

(3) wire

() paper pulp

() Edwin Austin Abbey

Max Kalish, the man who
modeled the fifty statues
for The Living Hall of
Fame, actually saw each
man for a total of

(5) Augustus Saint-Gaudens

() one week

15 1 ____.

(4) research

He supplemented the in-
formation gained at the
16 sittings by 2 ____ and
17 3 ____.

(3) models

() conversation

() strength

A tremendous amount of
4 ____ is required to do a
18 historical figure.

(1) sixty minutes

(2) photographs

Another man who modeled
19 Lincoln is 5 ____.

1/ This indicates page number of test.

2/ The red numbers indicate the correct responses.

3/ The black ink numbers indicate the number of the question in relation to the total number of questions in the test.

-2-

All of the omitted words or phrases appear in the column at the left of the page. Show that you know which word or phrase has been omitted from each blank by putting the number of the blank in the proper parentheses at the left.

- (1) support
(4) wooden lathes
(2) increase
(5) screening
() proportion
() strengthen
() clay
(3) wire
() paper pulp
- One makes an armature to _____ the clay.
We made a paper core for our statues because we wished to _____ the clay that we had to use.
If the statue is to have free arms and legs, it will need more _____ on the armature.
Armatures for heroic (larger than life-size) statues are often made of _____ and _____.

- () Edwin Austin Abbey
(2) Augustus Saint-Gaudens
() one week
(4) research
(3) models
() conversation
() strength
(1) sixty minutes
(2) photographs
- Max Kallish, the man who modeled the fifty statues for the Living Hall of Fame, actually saw each man for a total of _____.
He supplemented the information gained at the sittings by _____ and _____.
A tremendous amount of _____ is required to do a historical figure.
Another man who modeled _____ Lincoln is _____.

1/ This indicates page number of test.

2/ The red numbers indicate the correct responses.

3/ The black ink numbers indicate the number of the question in relation to the total number of questions in the test.

-3-

All of the omitted words or phrases appear in the column at the left of the page. Show that you know which word or phrase has been omitted from each blank by putting the number of the blank in the proper parentheses at the left.

() shellaced

A statue is sculpture that
20 may be seen from 1____ view.

() cast

The panels on the Burns' monument are examples of

(1) any

21 2____.

() portrait

Plaster of Paris is first splashed on the modeled

() one

22 figure to make the 3____.

(2) bas-relief

Projections, such as the tail and ears of a dog, would be 4____ before the

() soaped

23 mold was made.

(3) mold

The first layer of the mold
24 is usually 5____.

(4) removed

(5) tinted

() two

One draws, plans and finds photographs of at least
1____ views of the statue

(5) similar

25 that he is to make.

() different

One constantly checks the proportion and the 2____ at
26 every stage of modeling.

(1) three

() detail

The head is 3____ on the
27 figure.

() draws

(3) tilted

One 4____ the forehead, cheek-
bones, jaw, and nose on the
28 head.

() straight

(2) planes

The upper leg and the lower leg have a larger muscular
29 development in 5____ places.

(4) builds

All of the omitted words or phrases appear in the column at the left of the page. Show that you know which word or phrase has been omitted from each blank by putting the number of the blank in the proper parentheses at the left.

- | | |
|---|----------------|
| 1. A statue is sculpture that
2. may be seen from 1 view. | () shellacked |
| 3. The panels on the Burns
monument are examples of | () east |
| 4. Plaster of Paris is first
applied on the modeled
figure to make the 3 | () any |
| 5. Projections, such as the
tail and ears of a dog,
would be 4 before the
mold was made. | () portrait |
| 6. The first layer of the mold
is usually 5 | () one |
| 7. One draws, plans and finds
photographs of at least
1 views of the statue
so that he is to make. | (2) bas-relief |
| 8. One constantly checks the
proportion and the 2 at
every stage of modeling. | () soaked |
| 9. The head is 3 on the
figure. | (3) mold |
| 10. One 4 the forehead, cheek,
bones, jaw, and nose on the
ahead. | (4) removed |
| 11. The upper leg and the lower
leg have a larger muscular
development in 5 places. | (5) fitted |
| | ***** |
| | () two |
| | (7) similar |
| | () different |
| | () three |
| | () detail |
| | () draws |
| | (8) fitted |
| | () straight |
| | (9) planes |
| | () bulks |

-4-

All of the omitted words or phrases appear in the column at the left of the page. Show that you know which word or phrase has been omitted from each blank by putting the number of the blank in the proper parentheses at the left.

- (3) Boston 30 Cyrus E. Dallin is 1____.
- () ten 31 He was born in 2____.
- () musician He spent many years of his
- (2) Utah 32 life in 3____.
- (4) three 33 4____ of his statues are in Boston.
- (5) teacher He was a 5____ as well as
- () Italy 34 a sculptor.
- (1) dead 35 The 4____ of his angels are especially well done.
- () Rome 36 5____ is a well known monument in the Forest Hills Cemetery in Boston.
- () living

- () jewelry Augustus Saint-Gaudens was
- () France 35 born in 1____.
- () sitting Saint-Gauden's statue of
- () The Signal of Peace 36 Lincoln is 2____.
- () Stevenson He may be said to be the
- (3) coin 37 father of fine 3____ design- ing in the United States.
- (1) Ireland His statue of 4____ won fame
- (4) Sherman 38 for him in France as well as in this country.
- (5) The Peace of God He is known also for his
- (2) standing 39 monument 5____ which stands in Rock Creek Cemetery in Washington, D. C.

All of the omitted words or phrases appear in the column at the left of the page. Show that you know which word or phrase has been omitted from each blank by putting the number of the blank in the proper parentheses at the left.

- | | |
|--|-----------------------|
| _____ as Cyrus E. Ballin is 1 _____. | (3) Boston |
| _____ He was born in 2 _____. | () ten |
| _____ He spent many years of his life in 3 _____. | () musician |
| _____ of his statues are in Boston. | (2) Utah |
| _____ He was a 5 _____ as well as a sculptor. | (4) three |
| | (5) teacher |
| | () Italy |
| | () dead |
| | () Rome |
| | () living |
| | ***** |
| _____ Augustus Saint-Gaudens was born in 1 _____. | () jewelry |
| _____ Saint-Gaudens' statue of Lincoln is 2 _____. | () France |
| _____ He may be said to be the father of fine 3 _____ design- ing in the United States. | () sitting |
| _____ His statue of 4 _____ won fame for him in France as well as in this country. | () The Sign of Peace |
| _____ He is known also for his monument 5 _____ which stands in Rock Creek Cemetery in Washing- ton, D. C. | () Stevenson |
| | (5) coin |
| | () Ireland |
| | (4) Sherman |
| | () The Peace of God |
| | (2) standing |

-5-

All of the omitted words or phrases appear in the column at the left of the page. Show that you know which word or phrase has been omitted from each blank by putting the number of the blank in the proper parentheses at the left.

- (2) Minute Man Daniel Chester French was
40 born in 1 ____.
- (1) New Hampshire His first statue has been
() Lincoln, Nebraska used in this war as a sym-
41 bol of defense. I is
() Passing of the Redman called 2 ____.
- (4) wings His best known statue of
(3) Washington, D. C. 42 3 ____.
- () New York 43 The 4 ____ of his angels are
especially well done.
- (5) Death and The Sculptor 5 ____ is a
() clothes 44 well known monument in the
Forest Hills Cemetery in
() John Harvard Boston.

In the blank before each word in the left-hand column, write the number from the right-hand list, corresponding to the tool, material, or place in the right-hand column. The same material, tool, or place may be used more than once. Some may not be used at all.

- (X) (7) A clay that does not harden 45 1. sand
- (O) (3) A common plastic earth 46 2. plaster
of Paris
- (X) (5) a rock composed of quartz, feldspar, 47 3. clay
and mica
- () (2) calcined gypsum (gypsum rendered by 48 4. bronze
heat)
- () (4) a reddish-brown alloy of copper and 49 5. granite
tin
- () (7) a commercial clay 50 6. marble
- (3) used for making pottery 51 7. Plaste-
line

All of the omitted words or phrases appear in the column at the left of the page. Show that you know which word or phrase has been omitted from each blank by putting the number of the blank in the proper parentheses at the left.

- (2) Minute Man Daniel Chester French was
born in 1 _____.
- (1) New Hampshire His first statue has been
used in this war as a sym-
bol of defense. It is
called 2 _____.
- (4) wings His best known statue of
Lincoln is located in
Washington, D. C. No 3 _____.
- () New York The 4 _____ of his angels are
especially well done.
- (2) Death and The Sculptor 5 _____ is a
well known monument in the
Forest Hills Cemetery in
Boston.
- () John Harvard

In the blank before each word in the left-hand column, write the number from the right-hand list, corresponding to the tool, material, or place in the right-hand column. The same material, tool, or place may be used more than once. Some may not be used at all.

- (7) A clay that does not harden No 1. sand
- (3) A common plastic earth No 2. plaster
of Paris
- (2) A rock composed of quartz, feldspar, and mica No 3. clay
- (2) colored gypsum (gypsum rendered by No 4. bronze best)
- (4) a reddish-brown alloy of copper and No 5. granite tin
- (7) a commercial clay No 6. marble
- (3) used for making pottery No 7. plaster
line

-6-

- (1) an instrument like a pair of compasses, ⁵² 1. calipers for measuring diameters.
- (6) small long-jawed pincers for bending ⁵³ 2. cores
- (4) forms for shaping any fluid or plastic ⁵⁴ 3. casts material
- (1) sometimes used for enlarging an object ⁵⁵ 4. molds
- (7) establishments in which articles are ⁵⁶ 5. chisels cast from metal
- (3) impressions as in wax or plaster ⁵⁷ 6. pliers
- (1) a sculptor's measure ⁵⁸ 7. foundries 1/

Read each statement carefully. If you think the statement is true, pencil a circle in the space to the left of the number of the statement. If you think it is false make an X in the space to the left of the number of the statement. See statements one and two.

- (X) 1. The Lincoln statue by Gutzon Borglum is similar to the Lincoln statue in the Lincoln Memorial.
- (O) 2. Masks were invented from 12,000 to 20,000 years ago.
- (O) 3. An armature should be slightly smaller than the ⁵⁹ proposed modeled statue.
- (X) 4. The earliest masks were invented for sport or beauty. ⁶⁰
- (O) 5. Masks may be made from paper, wood, ebony, onyx, ⁶¹ shells, and reeds.
- (X) 6. Augustus Saint-Gaudens did the statue of Lincoln ⁶² that is in the Lincoln Memorial in Washington, D. C.
- (O) 7. Max Kalish made the only statue of Lincoln actually ⁶³ delivering the Gettysburg Address.
- (X) 8. Max Kalish spent more time making his fifty statues ⁶⁴ for the Living Hall of Fame than he did in making his Lincoln statue.

1/ These questions were all on the previous page on the original test.

- (1) an instrument like a pair of compasses, and calipers for measuring diameters.
- (2) small long-jawed pincers for bending of 2. cores
- (3) forms for shaping any fluid or plastic 3. casts material
- (4) sometimes used for enlarging an object 4. molds
- (5) establishments in which articles are 5. chisels cast from metal
- (6) impressions as in wax or plaster 6. pliers
- (7) a sculptor's measure 7. foundries

Read each statement carefully. If you think the statement is true, pencil a circle in the space to the left of the number of the statement. If you think it is false make an X in the space to the left of the number of the statement. See statements one and two.

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- (O) 2. Masks were invented from 12,000 to 20,000 years ago.
- (O) 3. An armature should be slightly smaller than the proposed modeled statue.
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- (O) 5. Masks may be made from paper, wood, ebony, onyx, shells, and reeds.
- (X) 6. Augustus Saint-Gaudens did the statue of Lincoln that is in the Lincoln Memorial in Washington, D. C.
- (O) 7. Max Kellish made the only statue of Lincoln actually delivering the Gettysburg Address.
- (X) 8. Max Kellish spent more time making his fifty statues for the living hair of fame than he did in making his Lincoln statue.

These questions were all on the previous page on the original test.

-7-

- (O) 9. Sculptors and wood carvers vary in their need for
65 a plan or drawing on paper.
- (X) 10. In wood carving, soap carving, stone cutting, or
66 modeling, it is the line and color that are most
important.
- (O) 11. If a piece of sculpture is well designed, it will
67 be just as up-to-date one hundred years from now
as it is today.
- (X) 12. The eyes of the human head protrude beyond the
68 forehead.
- (O) 13. A student of modeling finds the area below the
69 nose difficult.
- (X) 14. Bronze is poured into a mold in several install-
70 ments.
- (X) 15. The bronze statue is allowed to cool before the
71 mold is removed.
- (O) 16. A single statue may easily require a year or more
72 of an artist's entire time and energy.
- (O) 17. Sculpture which is showy but meaningless is
73 called rococo.
- (X) 18. One draws lines in the Plasteline to make the
74 edges of coats, dresses, hair, etc.
- (O) 19. The chest of the human figure is wider than the
75 waist.
- (X) 20. Plaster-of-Paris is used for garden or public
76 statues.
- (O) 21. Sand molds are used in the making of bronze
77 statues.
- (X) 22. An excellent statue may be placed in any light
78 and still appear the same.
- (O) 23. The planes of a statue are an important part of
79 the design.
- (X) 24. The statue of the youth in the square would
80 look better in a smaller area.

- (O) 9. Sculptors and wood carvers vary in their need for a plan or drawing on paper.
- (X) 10. In wood carving, soap carving, stone cutting, or modeling, it is the line and color that are most important.
- (O) 11. If a piece of sculpture is well designed, it will be just as up-to-date one hundred years from now as it is today.
- (X) 12. The eyes of the human head protrude beyond the forehead.
- (O) 13. A student of modeling finds the area below the nose difficult.
- (X) 14. Bronze is poured into a mold in several installments.
- (X) 15. The bronze statue is allowed to cool before the mold is removed.
- (O) 16. A single statue may easily require a year or more of an artist's entire time and energy.
- (O) 17. Sculpture which is showy but meaningless is called rococo.
- (X) 18. One draws lines in the Plasterine to make the edges of coats, dresses, hair, etc.
- (O) 19. The chest of the human figure is wider than the waist.
- (X) 20. Plaster-of-Paris is used for garden or public statues.
- (O) 21. Sand molds are used in the making of bronze statues.
- (X) 22. An excellent statue may be placed in any light and still appear the same.
- (O) 23. The planes of a statue are an important part of the design.
- (X) 24. The statue of the youth in the square would look better in a smaller area.

-8-

- (X) 25. The maker of plaster of Paris casts needs to know
81 very little about anatomy.
- (O) 26. Anyone can make tools that will help in modeling.
82
- (X) 27. A plaster cast is solid from one side to the other
83 like a bar of soap.
- (O) 28. The mold of a plaster cast is destroyed when it is
84 removed from the cast.
- (X) 29. Since Barre's monuments are made from granite, no
86 Plasteline models are produced in the stone sheds.
- (O) 30. We become aware of the structure of the body when
86 modeling.
- (X) 31. Allegorical sculpture is that which has many
87 flowers.
- (O) 32. The cost of casting a statue is often half of the
88 amount paid for the completed work.
- (X) 33. The artist usually casts his own statues.
89
- (O) 34. In making historical statues an artist must
90 acquire costumes and accurate information.
- (O) 35. Great sculpture appears to be simple.
91
- (X) 36. The granite statues found in the Barre cemeteries
92 are excellent examples of casting.
- (O) 37. Large, medium, and small shapes are as important
93 in the construction of sculpture as they are in
the painting of a design.
- (X) 38. A child's hand is opposite his waist.
94
- (O) 39. The height of a statue is measured in heads.
95
- (X) 40. In a bas-relief all of the modeling is raised an
96 equal distance from the background.
- (O) 41. One of the most famous bas-reliefs is the frieze
97 that was made for the Parthenon.

- (X) 32. The maker of plaster of Paris casts needs to know very little about anatomy.
31
- (O) 33. Anyone can make tools that will help in modeling.
32
- (X) 34. A plaster cast is solid from one side to the other like a bar of soap.
33
- (O) 35. The mold of a plaster cast is destroyed when it is removed from the cast.
34
- (X) 36. Since Barre's monuments are made from granite, no Plasterine models are produced in the stone sheds.
35
- (O) 37. We become aware of the structure of the body when modeling.
36
- (X) 38. Allegorical sculpture is that which has many flowers.
37
- (O) 39. The cost of casting a statue is often half of the amount paid for the completed work.
38
- (X) 40. The artist usually casts his own statues.
39
- (O) 41. In making historical statues an artist must acquire costumes and accurate information.
40
- (O) 42. Great sculpture appears to be simple.
41
- (X) 43. The granite statues found in the Barre cemeteries are excellent examples of casting.
42
- (O) 44. Large, medium, and small shapes are as important in the construction of sculpture as they are in the painting of a design.
43
- (X) 45. A child's hand is opposite his waist.
44
- (O) 46. The height of a statue is measured in heads.
45
- (X) 47. In a bas-relief all of the modeling is raised an equal distance from the background.
46
- (O) 48. One of the most famous bas-reliefs is the frieze that was made for the Parthenon.
47

-9-

- (X) 42. Cyrus E. Dallin is the sculptor whose statue of Paul Revere was placed in Boston during the early part of his career.
98
- (O) 43. Mr. Dallin is famous for his statues of horses and Indians. His statue, The Appeal to the Great Spirit is the best known of these.
79
- (X) 44. Mr. Elia Corti is the sculptor of the "Bobby" Burns monument.
100
- (X) 45. Mr. Novelli of Calcagni and Novelli made the panels on the monument.
101
- (O) 46. Sometimes a good sculptor will roughly prepare a statue for a master sculptor to finish.
102
- (X) 47. Once a sculptor has become skilled in cutting one kind of stone he feels "at home" with any kind.
103
- (O) 48. An artist has a complete mental picture of the object that he wishes to model.
104
- (O) 49. Some of the statues of the Pharaohs of ancient Egypt are colossal.
105
- (O) 50. The granite industry in Barre has attracted sculptors and stone workers from Scotland, England, and Italy.
106
- (X) 51. During a war there is very little work done in the stonesheds.
107
- (X) 52. The sculpture in Barre's cemeteries is considered to be equal to that to be found in the average cemetery.
108
- (O) 53. A sculptor must be able to see patterns easily in terms of height, width, and thickness.
109

The teachers.-- Mrs. Sawyer at North Barre, Miss Sinclair, and Mrs. Wales at Hatherton each supervised fifteen
I/ See Appendixes A, B, C, and D for photographs of models made by eighth grades. Some models had been destroyed before they could be photographed.

-14-

CHAPTER III

RESULTS OF TEACHING THE UNIT ON SCULPTURE

The First Unit

The pupils.-- The first unit was given to both the seventh and eighth grades, but due to unavoidable obstacles, it was impossible to give the test.^{1/}

The 106 seventh-grade pupils represent all of the pupils of this grade in the City, with the exception of about fifty who attended St. Monica's, the parochial school.

The North Barre group has a large percentage of boys and girls of Italian, Spanish, and French parentage. The families are in moderate circumstances.

The Mathewson classes have about half of the pupils coming from foreign parents. English and Scotch backgrounds are added to the above list. These families range from moderate to poor in financial support.

The Lincoln group comes from families which still have some of the foreign background. The families of good financial support are in the majority.

The teachers.-- Mrs. Sawyer, at North Barre, Miss Sinclair, and Mrs. Wales at Mathewson each supervised fifteen

^{1/} See Appendixes A. B. C. and D for photographs of models made by eighth grades. Some models had been destroyed before they could be photographed.

minutes of every fifty-minute period that was taught in their rooms. The art supervisor taught all of the period in Miss Irish's room, at Lincoln.

The intelligence quotients.-- There were no intelligence quotients available.

The unit and the delimitation.-- The unit and the delimitation consist of a list of the abilities which the teacher hopes the class will attain by studying the unit. The ideas are acceptable, but the statements are not specific enough.

The unit-assignment.-- The series of directions which compose the unit assignment do not stimulate the problem-solving method of learning which is the only way in which one learns.

There is a lack of directed reading. The provision for individual differences in aptitudes, abilities, interests, aims, and needs is limited to: a choice of one of four problems in modeling; a choice of one of four possibilities in soap carving; and a choice of one or more of sixteen optional-related activities primarily related to skill. There are five special study guides for the four main problems.

The reference material.-- All of the reference material is the property of the art supervisor. It was left in each room for two weeks. Book marks were placed in all of the magazines and books, but with the exception

of the books, Soap Carving, and Constructive Anatomy, no reference is made to this material in the unit-assignment.

The quality of the clay models.-- Due to the fact that the first unit used less time for Optional Related Activities, testing, and required reading, more time was devoted to actual modeling. It will be observed that the clay models of the first unit ^{1/} have more finish than those of unit three.^{2/} However, the greater variety of opportunity provided in the third unit makes it more adaptable to the individual differences of the group.

Soap Carving.-- All of the classes did soap carving. Dogs, horses, ducks, rabbits, and figures. Due to a lack of film these were not photographed.

Correlation with history.-- The subjects of the models were chosen by the pupils from colonial history. The horses were supposed to be General Washington's. One boy made a boy scout because he was very much interested in scouting and the scout convention that was here at the time. The geography being studied at the time was not adaptable to modeling.

The test.-- The growth of 106 pupils in the seventh grade unit on sculpture was measured by an objective test
^{1/} See Appendixes E, F, G and H for photographs of first unit models.

^{2/} See Appendixes I, K, L and N for photographs of third unit models.

of the books, Soap Carving, and Constructive Anatomy, no reference is made to this material in the unit-assignment.

The quality of the clay models.-- Due to the fact that the first unit used less time for Optional Related Activities, testing, and required reading, more time was devoted to actual modeling. It will be observed that the clay models of the first unit I have more finish than those of unit three. However, the greater variety of opportunity provided in the third unit makes it more adaptable to the individual differences of the group.

Soap Carving.-- All of the classes did soap carving. Dogs, horses, ducks, rabbits, and figures. Due to a lack of film these were not photographed.

Correlation with history.-- The subjects of the models were chosen by the pupils from colonial history. The horses were supposed to be General Washington's. One boy made a boy scout because he was very much interested in scouting and the scout convention that was held at the time. The geography being studied at the time was not adaptable to modeling.

The test.-- The growth of 100 pupils in the seventh grade unit on sculpture was measured by an objective test

I See Appendixes E, F, G and H for photographs of first unit models.

S See Appendixes I, K, L and N for photographs of third unit models.

of 109 questions. The range of the scores is from 8 to 75. The average growth is represented by a score of 43.75 for which the standard error is 1.31. The standard deviation is 13.44 for which the standard of error is 0.92.^{1/}

For all practical purposes the ranges of five groups in terms of scores are: Group I, 64-75; Group II, 51-63; Group III, 38-50; Group IV, 23-27; Group V, 8-22.^{2/} The graph shows that the upper group is extended 0.18 of a standard deviation, and the lower group is extended 0.16 of a standard deviation from the normal distribution.

To the nearest integer, the normal distribution of 106 pupils is: Group I, 7 pupils; Group II, 25 pupils; Group III, 40 pupils; Group IV, 25 pupils, and Group V, 7 pupils. The actual distribution had: a deficiency of three pupils in Group I; 2 pupils too many in Group II; 4 pupils too many in Group III; a deficiency of one pupil in Group IV; and the right number of pupils in Group V.^{3/}

The analysis of the test.-- A chart was made as follows:^{4/}

"The pupil's names [are arranged] in the order of the

1/ See Appendix O for complete figures.

2/ Roy O. Billett, Fundamentals of Secondary-School Teaching With Emphasis on the Unit Method, p. 637. Boston: Houghton Mifflin Company, 1940.

3/ Ibid.

4/ Roy O. Billett, op. cit., p. 628-630.

of the ... range of ... 8 to 12.

The ... is ... by ...

which the standard error is 1.31. The standard deviation

is 12.44. The ... of error is 1.31.

For all practical purposes ...

in terms of ... Group I, 60-75; Group II, 75-90;

Group III, 90-105; Group IV, 105-120; Group V, 120-135.

It is shown that the ... of ...

standard deviation ... and the lower ... is extended 0.15 of

a standard deviation ... the ...

the ... the ... of ...

Group I, 60-75; Group II, 75-90; Group III, 90-105;

Group IV, 105-120; Group V, 120-135.

The ... of ...

in Group I, 60-75; Group II, 75-90; Group III, 90-105;

Group IV, 105-120; Group V, 120-135.

and the ... of ...

The ... of ...

...

...

...

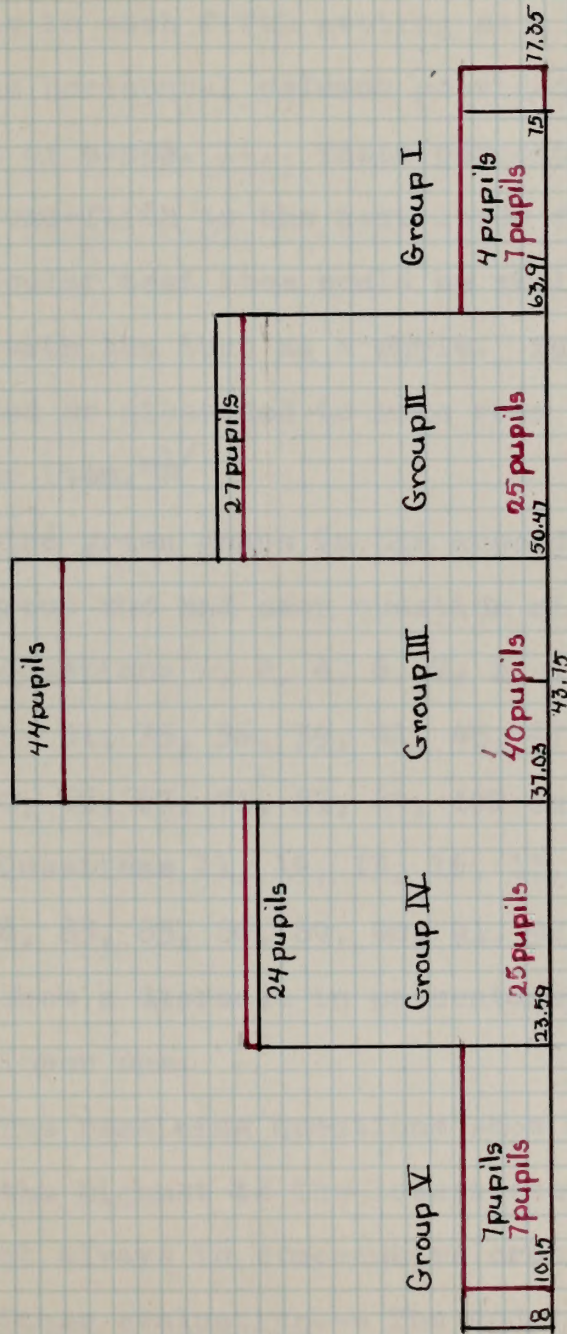
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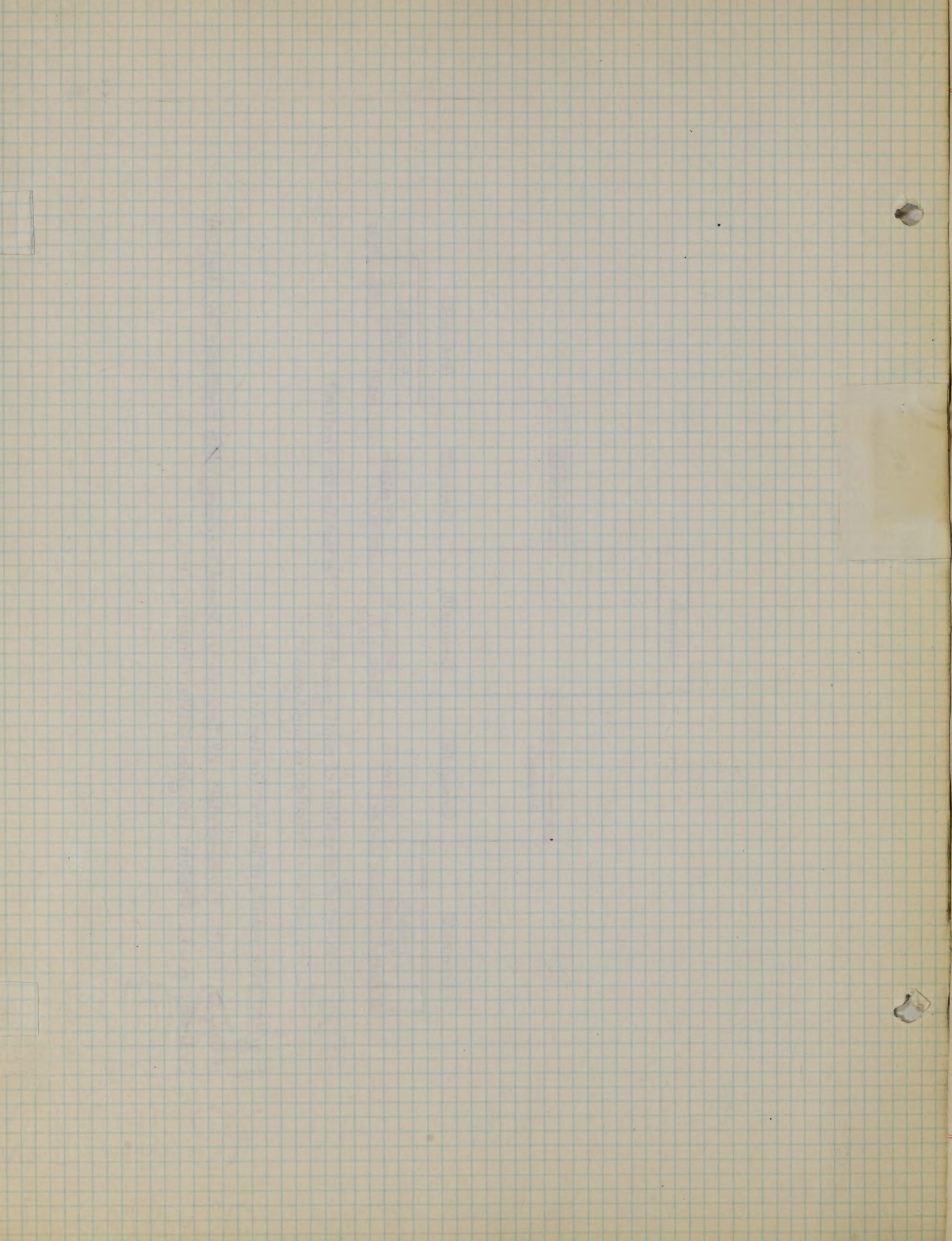


— The actual distribution of pupil growth from the test for the first unit.

— The normal distribution of pupil growth. ✓

Figure 1. The results of the test for the first unit.

✓ Roy O. Billett, Fundamentals of Secondary-School Teaching With Emphasis On The Unit Method, p 637. Boston: Houghton Mifflin Company, 1940.



total scores, from the highest to the lowest. The class [is] divided into fifths on the basis of the total score made on the test.[The] percentages of pupils in each fifth getting each item right [is entered] in the horizontal columns provided at the bottom of each block of names. These percentages should decrease from one-fifth to the next lower fifth. Otherwise that particular test item would be yielding results inconsistent with the test as a whole. Such an item should be revised or discarded to make room for another perhaps, better item."^{1/}

The green graph in the Appendix shows the numbers of the group who had each question right.^{2/}

Questions 1, 2, 4, 6, 7, 8, 9, 11, 14, 19, 21, 24, 29, 30, 31, 35, 36, 39, 41, 45, 47, 48, 49, 50, 51, 53, 59, 60, 62, 67, 71, 81, 84, 102 and 107 are poor.

Questions 11, 12, 13, 16, 17, 20, 23, 25, 31, 70, 72, 75, 76, 83, 85, 86, 89, 90, 91, 92, 93, are good since they show a decrease in percentages from one-fifth to the next lower one.

The remaining questions show a decrease in percentages from the highest to the lowest scores, but the decreases are not always in consecutive order in between.

Other evaluation.-- The models were displayed in a
^{1/} Roy O. Billett, loc. cit.

^{2/} See figure 4 in the Appendix.

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The Optional Related Activities.-- All of the activities but: e, (2), (5), and (6) under 18; a, b, c, under 19; and b and c under 47 were chosen by all four classes.

The table exhibits were the most popular. There was one of about forty pieces in each room.

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CHAPTER IV
THE UNIT ORGANIZATION OF THE TOPIC, SCULPTURE,
FOR THE SEVENTH GRADE

The Unit

Sculpture is an important means of expression as well as a vocation. A better understanding of how a sculptor works and develops ideas in materials will show how valuable a contribution this can be to democracy.

Delimitation of the Unit

1. "Sculpture implies a statement made in terms of mass about some significant phase of life....It should be the sculptor's aim to express his ideas forcefully and truthfully rather than to reproduce the appearance of nature."^{1/}
2. (The value of sculpture depends upon its use and the message it gives rather than upon the greatness of the age in which it is made.)^{2/}
3. Most sculpture tells something about the people who made it. Religion, customs, government, family, costume, ideals, geography, freedom, and slavery are but

^{1/} Thomas Munro and Others, Art in American Life And Education, the Fortieth Yearbook of the National Society for the Study of Education, (p.208). Bloomington, Ill.: Public School Publishing Co., 1941.

^{2/} Ibid., p. 212.

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Thomas Munro and Others, Art in American Life and Education, the Twentieth Yearbook of the National Society for the Study of Education, 27, 284, Bloomington, Ill.: Public School Publishing Co., 1941.

2/ Ibid., p. 212.

a few of the areas described in sculpture.

4. Carving and modeling have existed almost since the beginning of history. There is a certain similarity between objects made by different races.
5. [Purpose should influence sculpture]. "Sculpture for indoors should be simple in contour. Sculpture for outdoors should have a strong contour that is effective at a distance....Architectural sculpture----must be adapted to....the architectural plan."^{1/}
6. "Sculpture may represent an event but not reproduce any of the particular models. For example, the Shaw Memorial in Boston, by Augustus Saint Gaudens."^{2/}
7. Clay, stone, wood, ivory, soap, plastics, linoleum, plaster-of-Paris, ice, precious stones, glass, and metal are a few of the sculptor's materials. Each demands special tools and methods. [Hard materials require that the sculptor work in from the outside. He can only cut away. The sculptor must build from the inside out with soft materials]^{3/} The sculptor must have respect for his medium. [material]^{4/}

^{1/} M. Rose Collins and Olive L. Riley, Art Appreciation for Junior and Senior High Schools, p. 221. New York: Harcourt and Brace Company, 1931.

^{2/} Thomas Munro, op. cit., p. 209.

^{3/} M. Rose Collins and Olive L. Riley, op. cit., p. 222.

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2. Thomas Munro, op. cit., p. 209.

3. M. Rose Collins and Olive L. Riley, op. cit., p. 222.

4. Thomas Munro and Others, op. cit., p. 213.

8. A sculptor may express his ideas in the way he makes his work.^{1/}
9. "Sculpture of all of the finest periods is characterized by restraint, dignity, and repose....It conveys a feeling of permanence, self-control, and quiet beauty."^{2/}
10. The works of important sculptors are valuable because they add beauty and understanding to community, national and world living. Augustus Saint-Gaudens, Daniel Chester French, Cyrus E. Dallin, and Gutzon Borglum are a few of the American sculptors. The first three worked in New England.
11. There are abundant examples of modeling and carving in public buildings, cemeteries, stores, theatres, stone sheds, and homes.
12. Monument making is Barre's principal industry. Among the many occupations represented are drafting, sand-blasting, stone cutting, modeling, tool sharpening, pattern making, letter designing and stencil cutting.
13. Barre's two cemeteries are considered to have some of the best sculpture in the United States.
14. An excellent granite statue of Robert Burns stands on the high school lawn. It was carved by Elia Corti, an Italian who came to Barre. He carved the statue

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- and the panels on the base. A Mr. Novelli of Novelli and Calcagni "roughed out" the statue first. The statue is about life size.
15. An excellent nude youth granite war memorial is in the city square. It is heroic or larger than life size. The statue lacks suitable background. The fact that it was made by non-union workers from Canada has made it distasteful to the stonecutters in the past.
16. Everyone should have the opportunity to model and to carve. Exploration in these skills may suggest a vocation. Modeling and carving are both worth-while leisure-time hobbies.
17. Three-dimensional design is used in industry. [An object designed for industry] "must meet three needs: (1) It must be of service to the community or the individual; (2) It must be made of some durable material; (3) It must possess beauty of proportion, outline, and color."^{1/}
18. A sculptor always plans his work. Often he designs it on paper or makes a smaller model. Planning requires that the sculptor think of many views of his work. [A beginner plans from four views as the Egyptians did. A student sculptor uses eight views. An advanced

^{1/} William H. Varnum, Industrial Arts Design, p. 9, Peoria, Ill. Manuel Arts Press, 1916.

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19. "Design is the arrangement in a work of art; it establishes the proportion of the parts to the whole and to each other; it places them in relation to each other, and creates a pattern^{2/}." Design has rhythm or movement and balance....^{2/} Good design should have variety. This means^{3/} "differences in line, in mass and in order."^{3/}

a. "Line means outline or contour^{4/}. There are straight lines, curved lines....lines of action....and lines of direction."^{4/}

b. "Rhythm means a unison of movement."^{5/}

c. Proportion means comparison of measure. A figure is seven and a half heads tall in comparison to two heads wide through its widest part, the shoulders. A horse is about as tall as he is long. Sculpture may be of large or small proportion when it is contrasted with its surroundings. "Proportions are generally expressed in terms of ratio. A surface

^{1/} Rebecca Holliday, Art Supervisor in Hingham, Massachusetts.

^{2/} Leon L. Winslow, The Integrated School Art Program, p. 353. New York: McGraw Hill Book Company, Inc. 1939.

^{3/} Ibid., p. 84.

^{4/} State Department of Education, Montpelier, Vt., Suggested Course of Study and Teacher's Manual for Art Education, Grade I-VIII, p. 60. Montpelier, Vt.: Issued by authority of the State Board of Education, 1943.

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of five by eight inches would give a ratio of five by eight."^{1/}

d. Sculpture is made up of planes or flat surfaces.

It is the size and the position of the planes that makes the sculpture.

20. [Sculpture that is raised a little from the background,] "is known as low relief, or bas-relief."^{2/}

21. "In high relief the forms are raised farther from the background."^{3/}

22. A sculptor builds a clay statue on an armature.

a. "An armature is a structure of wood, iron, [lead or] compo piping, or wire upon which to build up a work in clay."^{4/} "The armature should have exactly the action and the general proportions of the work to be carried out."^{5/}

b. The armature must be smaller than the proposed figure. [Pliable lead or compo piping is preferred for under life-size because it is more easily changed than iron or wood.]^{6/} Wooden lathes, iron

^{1/} William H. Varnum, op. cit., p. 15.

^{2/} M. Rose Collins and Olive L. Riley, op. cit., p. 223.

^{3/} Ibid., p. 223.

^{4/} Albert Toft, Modeling and Sculpture, p. xiii. London: Seeley, Service & Company. Limited, 196 Shaftesbury Avenue, 1929.

^{5/} Ibid., p. 73-74.

^{6/} Ibid., pp. 72-73.

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rods, wire screening, wooden boards four and six inches wide are often used in large armatures. The armature helps to make the sculpture lighter since it substitutes for part of the clay.

- c. The armature is placed on a modeling stand with a revolving top. Thus the work may easily be brought into good light.

23. Clay sculpture dries and cracks with age. It may be reproduced or changed into permanent forms. Each process requires skilled workmen, and special tools and equipment.

- a. A clay sculpture may be hollowed out to a uniform shell and fired in a kiln to make terracotta.^{1/}
- b. Clay sculpture may be reproduced in plaster of Paris. Plaster of Paris is splashed on the clay in successive layers. The first layer is usually tinted. The mold is made in sections separated by metal or clay. When the mold is removed, it is often necessary to destroy the clay sculpture. The mold is securely fastened together and a fresh mixture of plaster of Paris is poured into the mold in successive amounts. The mold is rolled to make sure that the mixture reaches every space. When the sculpture has dried, the mold is chipped

1/ Albert Toft, op. cit., pp. 135-151.

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The mold is securely fastened together and a fresh mixture of plaster of Paris is poured into the mold in successive amounts. The mold is rolled to make sure that the mixture reaches every space. When the sculpture has dried, the mold is clipped

- away. The tinted layer serves as a warning to the worker that he must chip more carefully. The finished sculpture is just beyond the tinted layer.
- c. Sculpture may be reproduced in bronze by several processes.

Probable, Incidental and Indirect Learning Products

1. A clearer understanding that:
 - a. Man is as great as is his understanding and concern for his fellow-men.
 - b. The expression of a great man is centered upon the big things for which all countries are striving.
 - c. Man needs beauty and inspiration in his daily surroundings to keep him closer to democracy.
 - d. Men in the stone sheds in Barre work to make monuments that are beautiful and inspirational.
 - e. Truth and honesty are as important in sculpture as they are in buying and selling.
 - f. Skill is acquired by intelligent, persistent labor.
 - g. Everyone can enjoy fine sculpture.
 - h. We must be alert to the need for a careful selection of sculpture for our city. The choice of the background must be suitable.

Tentative Time Allotment

fifteen 50 minute periods.

* All items fifteen 50 minute periods. Those items that are numbered appear on the general study and activity guide sheet.

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Fifteen 50 minute periods.

The Unit Assignment

A. Introduction

* Sculpture is a means of saying something important in a permanent material.

* The teacher discusses the following questions with the class.

What does sculpture mean to Barre?

What does sculpture mean to you who will be Barre's Citizens?

What materials are used in sculpture?

What tools are used to make the sculpture?

Where can we find information about tools and materials?

* The teacher distributes the general study and activity guide sheets and explains the uses of the special study and activity guides.

B. Laboratory Work

1. The numbers following a question refer to the reading list. For example, (5:64) means that in the fifth book on page 64 you will find some help with this problem. O.R.A. means that you might be interested in the Optional Related Activity.

S.S.G. means that there is Special Study Guide

* All items marked with an asterisk indicate teacher activity. Those items that are numbered appear on the general study and activity guide sheet.

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2. for that problem.
2. Read the problems and activities in the general study guide, the special study guides and the optional related activities which are on cards in a file. Have you an activity or problem which you feel is not included? Write it down on a card and ask the teacher about it. If she considers it worth while you may do it in place of one that is listed.
3. What are the tools and materials of a sculptor who works in stone? (5:64)
4. What are the tools and materials of a sculptor who works in clay? (11:11, 25, 36, 39, 45, 55)
5. Does a sculptor carve a bronze statue?
- * The teacher gives a pre-test for the movie.
- * The teacher discusses the following questions with the class.

Did the movie answer some of your questions?

How might we learn more about modeling?
- * What could we model and carve?
- * The class and teacher study the list of suggestions and add ideas. S.S.G.
6. Choose one of the following activities. The others will be regarded as extra optional related activities.

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listed.

3. What are the tools and materials of a sculptor who

works in stone? (2:64)

4. What are the tools and materials of a sculptor who

works in clay? (11:11, 22, 36, 39, 42, 52)

5. Does a sculptor carve a bronze statue?

* The teacher gives a pre-test for the movie.

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Did the movie answer some of your questions?

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* What could we model and carve?

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6. Choose one of the following activities. The others

will be regarded as extra optional related activi-

ties.

- a. Model a small toy or animal. S.S.G. No armature.
- b. Model dishes. S.S.G.
- c. Model an animal. Use an armature. S.S.G.
- d. Model a figure. Use an armature. S.S.G.
- e. Model a head. Use an armature. S.S.G.
- f. A group may model a combination of the above suggestions to make a scene.
- g. Model a building. S.S.G. A group could make a group of buildings.
- h. Model a tile. S.S.G. A group can make a series of tiles.

7. What is the difference between high relief, low relief (bas-relief), and a full sculptured statue? (11:31, 32, 35, 39, 47, 49, 45) (12:80, 29, 23, 15, 65, 73) (5:53, 54, 57) (13:13-16) (24:4-8)

- a. See the panels on the Robert Burns monument or the bronze door on the mausoleum in Elmwood Cemetery.

* The teacher shows some pictures and indicates that bas-relief or low relief is slightly raised from the background. High relief is almost free from the background and middle relief is halfway between.

* The teacher reviews the facts about good design within a given area and draws rectangles on the blackboard in which to demonstrate divisions of

a. Model a small toy or animal. S.S.G. No

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bas-relief or low relief is slightly raised from

the background. High relief is almost free from

the background and middle relief is halfway between.

* The teacher reviews the facts about good design

within a given area and draws rectangles on the

blackboard in which to demonstrate divisions of

space. These points are illustrated:

8. What is good design within a given area?
 - a. The design will be balanced.
 - b. In free balance the space is divided unevenly. The main lines are above or below the center and they are to the right or the left of the center.
 - c. Axial balance is a kind of design in which the right side is a repetition of the left side in reverse.^{1/}
 - d. Central balance is an alternation or a repetition around a center.
 - e. The type of lines used within the design should be consistent with the design.
 - f. The design should fit the shape.
 - g. There should be a variety of shapes, sizes, and lines that are arranged to look well together.
9. What is an armature? O.R.A. What materials are needed to make one for a figure, an animal, and a head? S.S.G.
10. What type of support is needed for a head? S.S.G.
(11:37)
11. What type of support is needed for a figure or

^{1/} All drawings which are given in the first unit, would be used in this one.

an animal? (11:63)

12. How does one prepare for a tile? S.S.G.
13. How can the wire be enlarged to make a core or a cage? S.S.G.
14. What can you bring from home that could be used to protect the top of your desk when you model?
15. Could you make some modeling sticks out of Cheerio sticks, old pen holders and wire? Here is an opportunity for sharing. O.R.A.
16. What information will help you to draw plans?
17. Fill in partially drawn skeletons and add the proportions.^{1/}
 - a. The figure, has three big divisions that are approximately equal. These are: shoulder to hip; hip to knee; and knee to feet.
 - b. Elbows should be at the waist, and the hands should fall a little over half-way between the hip and the knee.
 - c. The adult figure is about seven and a half heads tall.
 - d. The shoulders are about two heads wide through the largest part of the upper arm.
 - e. The hips are about one and one-half heads wide.

^{1/} Rebecca Holliday, Supervisor of Art, Hingham, Mass., suggested the "partially drawn idea". Before, we drew them in class.

- f. The waist is one head wide. (front view)
- g. The body is one head through the widest part side view.

18. Fill in partially made drawings of the head.

Add information about proportion. 1/

- a. The head is shaped like an egg. It is divided into four equal parts. These are: top of head to hair line; hair line to eyes, eyes to nose; and nose to chin.
- b. It is three-quarters as wide front view as it is side view.
- c. A man's eyes are just above the center; a woman's eyes are below the center; and a baby's eyes are on the center.
- d. The width of the end of a man's nose equals the width of his eye.
- e. A negro's eye is wide and the end of his nose is wider.
- f. See diagrams on sheets for Modeling a Head for other equal parts.
- g. One third of the face, from the top of the nostril to the chin, equals the distance from the chin to the breast bone.

19. What makes sculpture good?

1/ Rebecca Holliday, Supervisor of Art, Hingham, Mass.

✓ Rebecca Holliday, Supervisor of Art, Hingham, Mass.

19. What makes sculpture good?

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nose to the chin, equals the distance

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✓ Add information about proportion.

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part side view.

g. The body is one head through the widest

f. The waist is one head wide. (front view)

- a. Does it say something about an important part of life?
 - b. Does it state the idea in a strong manner?
 - c. Is the idea more important than when the statue was made?
 - d. Is it placed in an appropriate place?
20. Do you know the Lincoln statue of Lincoln Park, Chicago? (15:20-21) O.R.A. Where do you think Lincoln was supposed to be? What is he doing? Who made the statue? What is the material?
21. Special assignment for one student. Read about Augustus Saint-Gaudens and be prepared to give a brief talk. S.S.G., (25:494, 495, 496-499.) Ask the teacher about this.
22. Do you know the Lincoln statue of the Lincoln Memorial in Washington, D. C.? (15:20-21) O.R.A.
 - a. Who made it?
 - b. What material was used?
 - c. Why should this statue be in Washington, D.C.?
 - d. What does it tell you about Lincoln?
 - e. What would it mean to someone from another country?
23. Special assignment for one student. Read about Daniel Chester French and be prepared to give a brief talk. English, History. S.S.G. Ask the

a. Does it say something about an important

part of life?

b. Does it state the idea in a strong manner?

c. Is the idea more important than when the

statue was made?

d. Is it placed in an appropriate place?

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Who made the statue? What is the material?

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Ask the teacher about this.

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country?

23. Special assignment for one student. Read about

Daniel Chester French and be prepared to give a

brief talk. English, History. S.S.G. Ask the

teacher about it.

24. What is the position of the Lincoln Statue by Gutzon Borglum? (15:20-21) (5:63) O.R.A.

a. What is the material?

25. Special assignment for one student. Read about Gutzon Borglum and be prepared to give a brief talk. S.S.G. (5:64) Ask the teacher about it.

26. What is Lincoln supposed to be doing in the Max Kalish Statue? (23:12-15, 28).

27. Special assignment for one student. Read about

28. Max Kalish (23:12-15, 28) and be prepared to give a brief talk. Ask the teacher about it.

* The teacher discusses the four Lincoln statues

29. with the class. Pictures should be shown.

What do the Lincoln statues tell us about Lincoln?

What has Lincoln come to represent in this country and in other countries?

30. Why should we have statues of him and of others like him?

What kinds of lines do you see in the statues?

* Would you say that a good statue appeared to be simple?

1. Lincoln, our Civil War president was a

thoughtful and a kind man. He believed in the

teacher about it.

24. What is the position of the Lincoln Statue by

Gutson Borglum? (12:20-21) (5:53) C.R.A.

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What has Lincoln come to represent in this

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Why should we have statues of him and of others

like him?

What kinds of lines do you see in the statues?

* Would you say that a good statue appeared to be

simple?

1. Lincoln, our Civil War president was a

thoughtful and a kind man. He believed in the

abolishment of slavery. Important part of all men's

2. His Gettysburg address defines democracy and his belief in it. See a statue of an Indian in
 3. Other countries know Lincoln for his belief in humanity and democracy. Student. Read about
 4. The long lines of the statues are broken at uneven intervals to add interest. Some of the lines flow into each other. Were by Cyrus
 5. The planes which make up the flat surfaces help one to see the statue.
28. The four special talks on Lincoln could be given at this time, in an English or a History class, or in the summary at the end.
29. Do you know the statue of the Minute Man by Daniel Chester French? (5:63) statues and dis-
 What was it made to represent? of Indian statues
 Where have we used a picture of it recently?
 What material is used? be interested in fine
30. Special assignment for one student. Read about Daniel Chester French and be prepared to give a brief talk. S.S.G. Ask the teacher about it.
31. Do you know the statue "Appeal to the Great Spirit" by Cyrus E. Dallin? (5:63) O.R.A. of
 What is the material? able to develop as he has
 What does the statue represent? living?

abolishment of slavery.

2. His Gettysburg address defines democracy and

his belief in it.

3. Other countries know Lincoln for his belief

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Where have we used a picture of it recently?

What material is used?

30. Special assignment for one student. Read about

Daniel Chester French and be prepared to give a

brief talk. S.S.G. Ask the teacher about it.

31. Do you know the statue "Appeal to the Great

Spirit" by Cyrus E. Dallin? (5:63) O.R.A.

What is the material?

What does the statue represent?

Is this activity an important part of all men's lives?

Why should there be a statue of an Indian in Boston?

32. Special assignment for one student. Read about Cyrus E. Dallin and be prepared to give a brief talk. S.S.G. Ask the teacher about it.

33. Do you know the statue of Paul Revere by Cyrus E. Dallin? (see clippings in file).

What material is used?

What particular activity does it represent?

Why is Paul Revere important to Boston and to America?

Do you know the story about the statue?

* The teacher discusses the three statues and displays pictures. Other pictures of Indian statues by Dallin could be shown at this time.

Why should Americans be interested in fine statues of Indians?

What do these statues tell us about them?

Do these statues meet the requirements of

34. design and purpose?

When Indians have had the opportunities of white men, are they able to develop as he has?

What did Paul Revere do for a living?

represent?

Is this activity an important part of all men's

lives?

Why should there be a statue of an Indian in

Boston?

32. Special assignment for one student. Read about

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Do these statues meet the requirements of

design and purpose?

When Indians have had the opportunities of

white men, are they able to develop as he has?

What did Paul Revere do for a living?

Is the spirit of early American democracy expressed in the two statues of colonial men?

Indians were here before we came to this

35. Who made the country. There are many still here.

Those who have had opportunity have advanced with white men.

The Dallin statues show us Indians who are not unlike white men in their sincerity and strong character. We should make further provisions for their education and development.

with Paul Revere was an outstanding patriot, silversmith and potter. Today we need men with wide interests to work for our country. Robert Burns, a Scottish

Both colonial figures seem to show that these men were active in the interests of their country. They show a concern for the group in which they live.

The teacher discusses the kind of line and balance to be found in the statues.

34. Who made the Robert Burns monument? and in-

a. Why should Barre have such a statue?

b. What does it say to you? are good.

c. Who was Robert Burns and what does he represent?

- d. Is the figure about life size?
- e. Do the lines look well together? Are they a part of the structure?

35. Who made the Youth Triumphant War Memorial?

Use the questions in 34. Omit c. Add the

following:

38. a. What is the difference between a portrait and a statue that is supposed to represent all American youth?

b. Compare the backgrounds of the two statues.

* The teacher briefly discusses the two statues with the class. The following conclusions should be made.

1. A large group of Barre men and women came from Scotland. Robert Burns, a Scottish poet, is loved by the people because he showed his understanding and love for them in his poetry. He did for the home what Lincoln did for democracy. A home is an important part of a democracy.

2. The Youth must look like the best of all youth. He must look determined and inspired.

3. The lines of both statues are good.

4. The Youth is heroic size while the Robert will be selected to work on the next three

- d. Is the figure about life size?
e. Do the lines look well together? Are they

a part of the statue?

35. Who made the Youth Triumphant War Memorial?

Use the questions in 34. Omit c. Add the

following:

- a. What is the difference between a portrait
and a statue that is supposed to represent
all American youth?
b. Compare the backgrounds of the two statues.
* The teacher briefly discusses the two statues
with the class. The following conclusions should
be made.

1. A large group of brave men and women came
from Scotland. Robert Burns, a Scottish
poet, is loved by the people because he
showed his understanding and love for them
in his poetry. He did for the home what
Lincoln did for democracy. A home is an
important part of a democracy.
2. The Youth must look like the best of all
youth. He must look determined and in-
spired.
3. The lines of both statues are good.
4. The Youth is heroic size while the Robert

- Burns is life size. The background for the Burns monument is adequate, while that of the other is lacking in size and quality.
36. Why do many statues have thin clothing or very little clothing?
 37. Does the style of clothing change very often?
 38. Is some modern clothing worthy of being made permanent in stone, bronze, or plastics?
 39. What country believed that its gods and goddesses were like human beings only more perfect? O.R.A.
 40. Do the proportions and parts of the human figure change very much from year to year?
 41. What should help you to appreciate the beauty of line and proportion to be found in the human figure?
 42. Be prepared to discuss questions 31, 32, 33, 34, 35, and 36 with the teacher.
 43. Modeling is a case of building the statue from the inside out. How does one work in carving?
 44. What can be done if a mistake is made in modeling? Can this be done in carving?
 45. What do stone sculptors use for models when they carve a monument? (28:159).
 46. A group of four who are especially interested will be selected to work on the next three

48. problems. *Carve grain laundry soaps, used soap*

a. What is one instrument that is used to help
for a sculptor to make an exact copy of the

49. *Have* model? Letter in clear sentences a brief
16 description of how it is used. (26:158-

50. *You* 159). If possible, visit a stone shed
with where there is one. Use oak tag 6 by 8

51. *How* inches. Ask the teacher for this refer-
ence. *eleven 8.3.2, (12:18, 26, 28, 30).*

52. b. What is one instrument that is used to
but help a sculptor reduce or enlarge his work?

art: Letter in clear sentences a brief descrip-
tion of how it is used. Choose the pro-

list: portional dividers. (26:235). They are
53. *A* sometimes called proportional calipers.

for Could you borrow a pair to exhibit for a
bas-day? Use oak tag 6 by 8 inches. O.R.A.

54. *This* Ask the teacher for this reference. *seen.*

c. Make drawings or mount pictures of the two

55. *Why* instruments. Letter the name on the front
simp of the card. See S.S.G. on mounting.

56. d. Be prepared to give a three minute talk
dign explaining the two instruments. Use

57. *What* pictures and information. *fine sculpture*

47. Why is soap suggested for carving?

48. Why are coarse grain laundry soaps, used soap and round or oval shaped soaps, undesirable for carving? (12:16) S.S.G. on Soap Carving.
49. Have you carved in some other material? Is it available to you?
50. You may use it in place of the soap. Talk with your teacher about your materials.
51. How many views must be drawn as plans for a carved article? S.S.G. (12:18, 26, 28, 30).
52. Make a carving in soap. People, animals, buildings, bas-reliefs, furniture and small articles can be made. Two cakes may be used together to make a larger one. See S.S.G. lists for suggestions.
53. A group of students may make their carvings for a scene, a shadow box, or a frieze of bas-reliefs. (12:46). S.S.G. lists.
54. Think of the fine statues that you have seen. What makes them have dignity?
55. Why do the most beautiful statues seem very simple?
56. How can a statue have action and still be dignified? (5:52, 54, 61, 64).
57. What are two reasons for having fine sculpture in any community?

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55. Why do the most beautiful statues seem very simple?
56. How can a statue have action and still be beautiful? (5:52, 54, 61, 64).
57. What are two reasons for having fine sculpture in any community?

58. Is the expression of truth, good-will, justice, and cooperation a part of our idea of democracy?

59. Do sculptors have a greater opportunity for developing these ideas in a democracy than in any other form of government?

60. Write a brief summary of what you have learned in this study. Use one side of a sheet of composition paper.

C. Summary:

There will be a program of several periods in which important activities and optional related activities will be shared with the class. There will be an opportunity for questions.

There will be a multiple-choice test.

5. Compton's Encyclopedia, Vol. 13, F. E. Compton & Company, Chicago, 1944, pp. 52-52. The text given brief but important facts. The photographs are clear and the examples of sculpture well chosen.
6. de Lencos, Pedro. "Zuni Hunt Fetiches". School Arts, 43 (November, 1943), pp. 86-89. The article has excellent photographs of stone animals and pottery.
7. de Lencos, Pedro. "Primitive Arts, False and True". School Arts, 43 (November, 1943), pp. 74-76. Excellent photographs of primitive pottery and primitive wood-carving.
8. de Lencos, Pedro. "Indian Art Craft of the Northwest". School Arts, 43 (November, 1943), pp. 90-91. The photographs of slate-carving and wood-carving are excellent.
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Code to Available Study Guide References

Code No.

1. Beck, Charles F. "Figures Without Clay". School Arts, 44 (February, 1945), pp. 202-203.
The figures are made with rolls of newspapers. Good photographs accompany a clear description of "how to do it". Student level.
2. Benda, W. T. "Masks--Most Ancient of Arts". American Artist, 8 (January, 1944), pp. 23-25.
This has excellent information for the teacher, describes historic and modern uses. Tools and materials are listed. Excellent photographs of eight masks.
3. Bridgeman, George B. Constructive Anatomy. Bridgeman Publishers. Pelham, New York, 1928, pp. 11-213.
The drawing is superior. The excellent information is rather technical.
4. Clark, Guy Gaylor, and Truex, Van Day. "Taste--Is It Dynamite?" Craft Horizons, 3 (February, 1944), pp. 4-8. There are excellent photographs (7" x 8") of glass, pewter, and bronze. The brief comments under each cut are superior.
5. Compton's Picture Encyclopedia and Fact Index. Vol. 13. F. E. Compton & Company. Chicago, 1944. pp. 52-62.
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5. Compton's Picture Encyclopedia and Fact Index. Vol. 15. F. E. Compton & Company, Chicago, 1944, pp. 52-62.
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- (September, 1943), pp. 24-27.
The excellent, informative photographs show how to carve a figure in plastic material. The information is good.
10. Dunn, Ione. "The Principles of African Art". School Arts, 43 (November, 1943), pp. 102-105.
The excellent information is for the teacher. The photographs of wood-carving are equally good. There are photographs and drawings of chairs.
 11. Ellis, Clifford, and Rosemary. Modelling for Amateurs. The Studio Publications, Inc., 381 Fourth Avenue, New York, 1944, pp. 7-79.
The photographs give excellent information. There is an excellent description of the procedure in modeling, the making of casts, and the making of wire and paper figures. Information is given explaining good examples of ancient modeling and sculpture. A seventh or eighth grade student can read it.
 12. Gaba, Lester. Soap Carving. The Studio Publications, Inc., 381 Fourth Avenue, New York. No date given. pp. 8-79. The photographs and the text are excellent. The patterns are for the beginner. The descriptions and photographs are for the advanced worker. A seventh or eighth grade student can read it.
 13. Glickman, Maurice. "A Sculptor's Views on Wood-Carving". American Artist, 7 (November, 1943), pp. 13-16. This article has: eight excellent photographs showing steps in wood-carving, and five photographs of sculpture in bronze, marble, plaster, and cast stone. The information includes materials and procedures, but it is for college level.
 14. Harvard Film Service. Clay to Bronze. (3 reels silent), Johnson High School, Stowe, S. Burlington. This is an old but an excellent movie. It shows all of the important steps of making a statue in clay, plaster of Paris and bronze. It takes about an hour. This includes the time required for changing the film.
 15. "How Many of These Lincoln Statues Do You Recognize?" The Highway Traveler, 16 (December, 1944-1945), pp. 20-21, 34. There are nine good photographs of statues of Lincoln. Weiman, Ball, Marnard, French, Saint-Gaudens, and Borglum are the sculptors.

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20-21, 34. There are nine good photographs of
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Saint-Gaudens, and Borglum are the sculptors.

16. Harris, Joe. "Indian Lore and Customs". School Arts, 43 (November, 1943), pp. 94-97. The information is suitable for the seventh or eighth grade. The photographs of masks from Java, Sumatra, the Solomon Islands, Congo Africa, and Guatemala are excellent.
17. Jaeger, Ellsworth. "The Way of The False Face". School Arts, 43 (November, 1943), pp. 92-93. This is an excellent, compact, survey of the mask from Egyptian times to those of the American Indian. There are good black and white drawings. The information is for college level.
18. Powell, Doane. "How To Make Masks". Art Instruction, 3 (December, 1939), pp. 20, 30. Clear, and adequate instructions are given for making a mask. There is one good photograph. The information can be read by an eighth grade student.
19. Spinden, Herbert J. "Mask Magic". Art Instruction, 43 (December, 1939), pp. 21-23. The article is on college level. The excellent photographs show ten kinds of masks.
20. "It All Started With Blue". American Artist, 4 (April, 1940), pp. 14-16. Two of the excellent photographs show steps in modeling. Three photographs are of glazed terra cotta. The text tells how the artist began his work.
21. "The Sculpture of Joseph Colletti". American Artist, 8 (February, 1944), pp. 8-11, 25. The excellent photographs are of stone sculpture. The text is for college level.
22. "Water-carrier". American Artist, 4 (February, 1940), p. 27. This is an excellent photograph of a bronze statue by Max Kalish. It is $5\frac{5}{8}$ by $9\frac{1}{2}$ inches.
23. Watson, Ernest W. "Max Kalish". American Artist, 9 (January, 1945), pp. 12-15, 28. There is an excellent description of how the sculptor planned and executed "The Living Hall of Washington 1944", and "Lincoln at Gettysburg". The information is in professional language. There are seven excellent photographs.

16. Harris, Joe. "Indian Lore and Customs". School Arts, 43 (November, 1943), pp. 94-97. The information is suitable for the seventh or eighth grade. The photographs of masks from Java, Sumatra, the Solomon Islands, Congo Africa, and Guatemala are excellent.
17. Jagger, Elsworth. "The Way of the False Face". School Arts, 43 (November, 1943), pp. 92-95. This is an excellent, compact, survey of the mask from Egyptian times to those of the American Indian. There are good black and white drawings. The information is for college level.
18. Powell, Donna. "How To Make Masks". Art Instruction, 3 (December, 1939), pp. 20, 30. Clear, and adequate instructions are given for making a mask. There is one good photograph. The information can be read by an eighth grade student.
19. Spinden, Herbert J. "Mask Making". Art Instruction, 43 (December, 1939), pp. 21-23. The article is on college level. The excellent photographs show ten kinds of masks.
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21. "The Sculpture of Joseph Galletti". American Artist, 8 (February, 1944), pp. 8-11, 23. The excellent photographs are of stone sculptures. The text is for college level.
22. "Water-carrier". American Artist, 4 (February, 1940), p. 27. This is an excellent photograph of a bronze statue by Max Kallia. It is 2 5/8 by 2 1/2 inches.
23. Watson, Ernest W. "Max Kallia". American Artist, 9 (January, 1942), pp. 12-15, 28. There is an excellent description of how the sculptor planned and executed "The Living Hall of Washington 1944", and "Lincoln at Gettysburg". The information is in professional language. There are seven excellent photographs.

24. Desirable "Edmond Amateis and His Sculpture for the Philadelphia Post Office". American Artist, 4 (December, 1940), pp. 4-8.

Code 1
1. Br There are sixteen excellent photographs of clay panels. There is an excellent photograph of a cast of a panel. The professional information explains how an artist plans such a project.

Fifty excellent black and white photographs of a selection of the best sculpture in France, Germany, Italy, and America. Brief statement about artist on sculpture. Sometimes a short story helps to make a point. Possibly for sixth grade. \$2.50.

2. Fowler, Harold North, and Mary Blackford. The Picture Book of Sculpture. New York: The Macmillan Company, 1939. v - 100 pp.

Fifty excellent photographs of the best sculpture of all periods. The text is excellent, but it would be for the best readers in the seventh and eighth grades. \$2.50.

3. Hoffman, Malvina. Heads and Tales. New York: Charles Scribner's Sons., 1936. pp. ix+416.

A well-told autobiography. Many excellent photographs of all types of sculpture. An account of the life of Rodin and some references to other sculptors. The History of the Hall of Man in the Field Museum of Chicago. \$5.00.

4. Hoffman, Malvina. Sculpture Inside And Out. New York: E. W. Norton & Company, 1939. 7-336 pp.

An excellent source book. Many large photographs and fine drawings. The tools, materials and processes required for modeling, carving, plaster-casting, bronze sculpture and enlarging are carefully covered. All the steps between the quarry and the finished product are included in the section on stone. There is a brief history of sculpture in the front. \$7.50.

5. Leeming, Joseph. Fun With Clay. New York: J. B. Lippincott Company, 1944. 5-96 pp.

Excellent directions for making clay tiles, coiled pottery, hand drawn and modeled pottery, slab pots, cast and pressed pottery, pottery on a wheel, and gelatin and rubber molds. Glazing and firing are treated. Pictures show tools and samples. \$2.00.

6. Leeming, Joseph. Fun With Wood. New York: Frederick A. Stokes Company, 1942. 7-111 pp.

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- carving, incising, chase carving, and level surface carving. The grain of wood and the kinds of tools are explained. Line drawings and pictures are excellent. A good bibliography. The Boston Public Library rates it as below high school level. \$2.25.
7. Rogers, Frances. Big Miss Liberty. New York: Frederick A. Stokes Company, 1938. 13-86 pp.
A story of how the Statue of Liberty came to be. An explanation of its meaning with the emphasis on "form without spirit is nothing". Well written, possibly for the fifth grade. Every child should read it. \$1.25.
 8. Smith, Susan. Made In America. New York: Alfred A. Knopf, 1929. 3-91 pp.
Good information on: Colonial furniture; glass making; Paul Revere, silversmith; Duncan Phyfe, cabinet maker; Thomas Jefferson, architect; Sandwich glass, Cape Cod houses; Currier and Ives prints; and John Rogers, sculptor. A few line drawings and a few small photographs. Seemed about seventh or eighth grade level. \$2.00.
 9. Smith, Susan. Made in Germany and Austria. New York: Minton Balch & Company, 1933. 13-75 pp.
A story of Dresden porcelain, Nurnberg and its Craftsmen, toys and Tyrolean peasant work. Both Nurnberg and the Tyrol have wood carving. The line drawings are good. The Boston Public Library rates it as below high school level. \$1.50.
 10. Strack, Lilian Holmes. Aluminum. New York: Harper & Brothers. Publishers, 1942. 9-56 pp.
A picture book of how aluminum is made and used. Excellent photographs 6 by 9 inches or 5 by 6 inches. A well written simplified text, possibly for seventh or eighth grade. \$1.00.
 11. Tomlinson, R. R. Crafts for Children. New York: The Studio Publications, Inc., 381 Fourth Ave., 1936, 9-120 pp.
An excellent survey of the history, teaching, principles and methods of crafts. The text is for college level. Eighteen pages of excellent photographs of baskets, puppets, embroidery, weaving, pottery, metal work, toys, printing, bookcraft, and woodwork. A book for the teacher. \$ 4.50.

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12. Wheeler, Ida W. Playing With Clay. New York: The Macmillan Company, 1927. vii - 116 pp.
Very simple language, possibly fourth grade level. An excellent description of how to make bowls, dishes, tiles, and figures in clay. Casting, carving, molding, and glazing are simply but adequately explained. Egyptian, Greek, Persian, Majolican and Indian ware are pictured. Addresses of Clay companies. \$2.00.*

2. Dishes, plates, small articles.-- Utensils of colonial and modern times; radio; candlestick.

3. Animals. Use an armature.-- Cow; horse; ox; goat; duck; sheep; colonial harness on horse.

4. Figures. Use an armature.-- Any colonial figure that represents a particular person or occupation; Indian figures; modern figures of workers.

5. Group Figures. Use an armature.-- The first town meeting; colonial church attendance; a colonial school boy; costumes of Colonial Virginia, Pennsylvania, and Massachusetts; modern clothing; Indian costume.

6. Bas-Reliefs.-- Use any idea already suggested.

Choose a single idea from any of the following for one bas-relief.

A group should use ideas that are related to each other. Colonial and modern interiors and exteriors; colonial and modern activities of the home; colonial and modern trades; colonial and modern

* The price is as listed in the Cumulative Book Index.

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Special Study and Activity Guides

Suggestions for Grade VII.--

1. Small animal.-- Rabbit; mouse; cat; elephant; dog; panda; goat; doll; duck; hen; whale.
2. Dishes, fruit, small article.-- Utensils of colonial and modern times; radio; candlestick.
3. Animals. Use an armature.-- Cow; horse; ox; goat; duck; sheep; colonial harness on horse.
4. Figure. Use an armature.-- Any colonial figure that represents a particular person or occupation; Indian figures; modern figures of workers.
5. Group Figures. Use an armature.-- The first town meeting; colonial church attendance; a colonial school boy; costumes of Colonial Virginia, Pennsylvania, and Massachusetts; modern clothing; Indian costume.
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7. Buildings.-- Southwestern adobe houses; log cabins; early colonial; late colonial and modern.

A group of buildings that would be found, in the center of a southwestern Indian settlement; a colonial New England settlement; a modern city or country town; the buildings of Mount Vernon.

(To be Made).-- Cyrus E. Dallin, Gutzon Borglum, Daniel Chester French, Augustus Saint-Gaudens, Construction of Small Animals and Dishes, Making a Plaster Cast.

Collecting Pictures.-- (a) Select pictures for bulletin board, reflectoscope or poster. (b) Select clear prints. (c) Ask before you cut or borrow pictures. You are worse than dishonest if you do otherwise. (d) Trim pictures neatly. Leave information attached. If information was on another page, clip it to the print.

List of Schools for Education in Sculpture.--^{1/}

1. Miss Anna Clarke, Executive Secretary Art Students League of New York, 215 West 57th Street, Borough of Manhattan, New York.
2. Mr. Stefan Hirsch, Chairman Bennington College, Art Division, Bennington, Vermont.
3. Mr. J. C. Eghert, Director of University Extension,

^{1/} The American Federation of Arts. Art School Directory. Volume I for the years 1939-1940. Washington, D. C.: The American Federation of Arts, Inc., 1939. 11-158 pp.

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Architecture, Troy, N. Y.
6. Mr. William James, Acting Director, School of the
Museum of Fine Arts, Fenway and Museum Road,
Boston, Massachusetts.
7. Mr. Gordon L. Reynolds, President, Massachusetts
School of Art, 364 Brookline Avenue, Boston,
Massachusetts.

Mounting Pictures.--

1. Always consult the teacher before you mount any-
thing.
2. A picture may be mounted, placed in an envelope,
or placed in a folder.
3. Permanent Mounting.
 - a. Place print on mount.
 - b. The lower margin should be wider than the top
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changing.

c. Lightly outline the corners of the print on the mount.

d. Place picture face down on an old newspaper.

e. Brush the entire back with a thin coating of creamy paste.

f. Quickly place top edge of print in place on mount, and smooth print from the top.

g. Place a paper towel on print and using the thin edge of hands press the print from the center to the edge of the mount. This removes air bubbles.

(1) Remove excess paste with damp towel.

h. Hold mount to eye level to look for bubbles, and smooth again if necessary.

i. Place a clean towel over the print. Cover with a heavy weight.

j. Leave it overnight to dry. Large prints may need a day or two.

4. Temporary mounting.

a. Apply paste only in the corners, or

b. Apply paste along the top and bottom edges.

c. Place top edge of print on mount first, and smooth print to lower edge.

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5. A small amount of information can be pasted below the print. *Admiral Farragut*
6. If a large amount of valuable information accompanies the print consult the teacher. It may be mounted, or placed in a folder, or an envelope.
7. Label everything neatly in ink. Use capital and small letters.

List of American Sculptors.---1/

1. Horatio Greenough

First trained sculptor in this country. Studied under Thorwaldsen who was sculptor of "Lion of Lucerne" and of "The Divine Healer" in Hopkins Hospital. Made a statue of Washington posed as Olympian Zeus now in Smithsonian.

2. Hiram Powers *Fields*

Greek Slave *Sculptor*

3. Thomas Crawford *in Memorial, Washington*

Statue of Liberty on Dome of Capitol, Washington.

4. John Q. A. Ward *and the Sculptor*

7. *Washington McNeil*

Indian Hunter

Monument to Henry Ward Beecher

1/ Leone L. Winslow and Others. A Tentative Course of Study, Art for Junior High Schools, (Grades Seven to Nine Inclusive)". (Mimeographed). 1944, p. 146. Baltimore, Maryland: City of Baltimore, Department of Education.

Leone L. Winslow and Others, op. cit., p. 19.

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5. Augustus Saint-Gaudens

Memorial to Admiral Farragut

Statue of Lincoln, Lincoln Park, Chicago

The Puritan

Figure over grave of Mrs. Henry Adams, Rock

Creek Cemetery, Washington, D. C.

Shaw Memorial

Robert Louis Stevenson

General Sherman

Homer Saint-Gaudens

6. Daniel Chester French

Minute Man, Concord, Massachusetts

Memorial to Alice Freeman Palmer

Alma Mater

In Flanders Fields

Death and the Sculptor

Lincoln Statue in Memorial, Washington

College Youth - Christian Student

Angel of Death and the Sculptor^{1/}

7. Herman Atkins McNeil

The Sun Vow

Coming of the White Man

Ezra Cornell - Cornell University

^{1/} Leone L. Winslow and Others, op. cit., p. 79.

Bara Cornell - Cornell University

Domine of the White Man

The Sun Vow

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Statue of Lincoln, Lincoln Park, Chicago

Memorial to Admiral Farragut

5. Augustus Saint-Gaudens

8. Anna Coleman Ladd

Fountain Eros and Anteros, S. D.

The Dance, Sheridan, Columbus Circle, Washington. 1/

9. Herbert Adams

Memorial to Dr. Welch, White Man's Land

Memorial to Charles Pratt

10. Lorado Taft

Fountain of the Great Lakes

1. Black Hawk (1848-1907)

Columbus Fountain, Black Creek Cemetery, Washington.

2. Group of the Blind (1890-1931)

11. Cyrus Edwin Dallin

Appeal to the Great Spirit

3. A Signal of Peace (1907-1941)

Medicine Man, Black Hill, S. D.

12. Paul Wayland Bartlett

4. Michelangelo (1885-)

Benjamin Franklin, Radio Center, N. Y.

Lafayette, Gazelle

13. Frederick William MacMonnies

Nathan Hale, Child

Shakespeare

6. Bacchante (1875-)

14. Gutzon Borglum

2/ Ibid., p. 179. Portrait of Lincoln

Old Trail Drivers

8. Anna Coleman Ladd
Fountain Frogs and Antelope
The Dance
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Memorial to Dr. Welch
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Beethoven
14. Gustav Borglum
Portrait of Lincoln
Old Trail Drivers

Mares of Diomedes

Mt. Rushmore,- Black Hills, S. D.

General Sheridan, Columbus Circle, Washington.^{1/}

15. Solon Borglum

On the Border of the White Man's Land

Bucky O'Neill

One in a Thousand

Contemporary American Sculpture.--^{2/}

1. Saint Gaudens (1848-1907)

Adams Memorial, Rock Creek Cemetery, Washington.

2. French, Daniel Chester (1850-1931)

Lincoln, Lincoln Memorial, Washington.

Angel of Death and Sculptor

3. Borglum, Gutzon (1867-1941)

Mt. Rushmore - Black Hill, S. D.

General Sheridan - Columbus Circle, Washington.

4. Manship, Paul (1885-

Prometheus Fountain - Radio Center, N. Y.

Dancer and Gazelle

5. Zorach, Wm. (1887-

Mother and Child

Cat

6. Milles, Carl (1875-

^{1/} Leone L. Winslow and Others, loc, cit.

^{2/} Ibid., p. 79.

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Mt. Rushmore - Black Hills, S. D.

3. Borglum, Gutzon (1867-1941)

Angel of Death and Sculptor

Lincoln, Lincoln Memorial, Washington.

2. French, Daniel Chester (1850-1931)

Adam Memorial, Rock Creek Cemetery, Washington.

1. Saint Gaudens (1848-1907)

Contemporary American Sculpture.---

One in a Thousand

Bucky O'Neill

On the Border of the White Man's Land

15. Solon Borglum

General Sheridan, Columbus Circle, Washington. S/

Mt. Rushmore - Black Hills, S. D.

Notes of Monuments

Marriage of the Rivers

Optional Related Activities Swedenborg

7. Wheelock, Warren (1881-

Black Dancer

Lincoln

8. Warneke, Heinz (1895-

Prodigal Son

Hissing Geese

When you have finished the work assigned you may like to consult the teacher about your choice of one or more of the following activities:

1. Letter-writing.-- (a) Write to a Chamber of Commerce for a postcard picture of a statue that is needed. (b) Write to Caproni Galleries of Amedeo Incorporated, 1914 Washington Street, Boston, Massachusetts for a free catalogue. (c) Write to one of the art schools listed on the E.S. G. List of Schools for Sculpture Education for information about courses and costs. A group could work on (d) and prepare a chart.
2. Written Report.-- (a) Find pictures of two buildings which have sculpture. Write why you think that the sculpture is good or poor. Think of the size, shape, line, and purpose of both the sculpture and the building. (b) Write why you think that playwright might find the sculpture by

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Optional Related Activities

A committee will work with the teacher to select those talks, exhibits, reports, and demonstrations which are good enough to be presented to the class in the summary program which will take place during the last six days. No talk will be over three minutes in length.

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- John Rogers valuable. (Ask the teacher for pictures.) (c) Write why you consider two monuments to be good in either Hope or Elmwood Cemetery. (d) Describe two outstanding pieces of work by a woman sculptor. (e) List five professions that use modeling. Explain how it is used. (f) Write three reasons why you consider a piece of sculpture beautiful.
3. Creative Writing.-- (a) Write a dramatization of the story of Cyrus E. Dallin's statue of Paul Revere. (b) Write a dramatization on the selection of a piece of sculpture for a special place.
4. Oral Report.-- (a) Describe the cast of a section of the Parthenon frieze that is in the high school. Tell what it represents. Ask permission at the high school office. (b) Report the information of salary range; experience required of stone cutters; and dangers of the stone cutting trade. Use charts provided by committee. (c) Explain one method of making a mask. (18:20, 30.) (d) Describe the materials of ancient masks. Tell why the masks were made. See pictures and notes explaining pictures. (16:94-7) (17:92-3) (19:21-23.) (e) Report on one of the references on the list of books and magazines. (f) Explain

some process. Use pictures in file.

5. Chart.-- (a) Show the experience required of a sculptor, a letter carver, and a polisher. Inquire courteously at the office of Cook, Watkins and Patch. (b) Show the salary range of these three workers in Barre. Inquire at the Granite Cutters Insurance Company. (c) Show the death rate in Barre for the last five years. Inquire at the (Granite Cutters Insurance Company). (d) Show how many stonesheds use the dust collecting devices. Inquire at the Sanitorium. Letter information for each on a 6 by 8 inch card.
6. Drawing.-- (a) Make a scale drawing of an armature for an animal. Give dimensions. Label it. Use photographs or real model for proportions. Use white drawing paper 9 by 12 inches. (b) Draw two large skeletons front and side view. Divide by head measurement. (3:155, 162, 176, 182, 188). (c) Draw and shade the figure side view. Show direction of parts of the body. Draw a red line from ear to ankle bone. (3:73). (d) Draw an arm. Outline bone in red. Use one - (3:71, 73, 103). (e) Draw a neck. Use one (3:109, 111). (f) Draw a head. Use one. (3:122, 127). (a) (b) (c) (d) (e) (f) use wrapping paper 24 by 36 inches. Use

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black ink or water color for final outline. Label with title, book, and page number. (g) Draw a series of cartoons showing steps in any process or work. (h) Draw a poster advertising the sculpture made in Barre. Use white drawing paper 12 by 18 inches. Use one color and black. Use water-colors.

7. Exhibits.-- (a) Borrow tools for wood-carving, (b) stone-carving, and for (c) modeling. (d) Borrow molded and carved objects from members of the class. (e) Pictures from the file or those mounted by other pupils. (f) Borrow books and magazines. One, two, or three pupils could work on one of these depending upon the size of the exhibit. S.S.G. Exhibits.
8. Construction.-- Make (a) a modeling tool, (b) a wire and paper animal (11:63). (c) a small object in plaster of Paris (S.S.G. casting with plaster of Paris), some paper sculpture. (12:54). (d) Make a newspaper animal or figure. (1:202-203).
9. Collection.-- Find photographs of (a) animals, (b) skeletons (animal or human), (c) figures in sport clothes, (d) heads of animals or people, (e) American sculpture S.S.G. list, (f) animal sculpture, (g) statues of Lincoln, (h) work in

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8. Construction.-- Make (a) a modeling tool, (b) a wire and paper animal (11:2). (c) a small object in plaster of Paris (S.S.G. casting with plaster of Paris), some paper sculpture. (12:24). (d) Make a newspaper animal or figure. (1:202-203).

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the granite business, (i) sculpture by the artist studied, (j) casting and mold making (k) War memorials, (l) architecture with sculpture. S.S.G. Collecting pictures. (m) Find newspaper and magazine clippings about sculpture.

The Second Unit

The unit and its delimitation.-- The first statement presents the over-all aim of the unit. The following twenty-three statements define exactly the directions and the various distances that the teacher expects the class to travel when they are studying the unit. The eight Probable Indirect and Incidental Learning Products are understandings which will probably come as by-products of the learning process. The variety and range of these objectives provide for a similar range in the development of pupil ability.

The unit-assignment.-- The unit-assignment is composed of questions as well as directions which stimulate problem solving. Throughout the unit-assignment the pupil is directed to: a reading list of twenty-six items;

1/ The second unit was developed as part of the requirements for the course, The Unit Method in the Secondary School. The study of the course; the book, Fundamentals of Secondary-School Teaching with Emphasis on the Unit Method; and these units are each a necessary part of the preparation for writing a unit.

ten Special Study and Activity Guides; and forty-six
Optional Related Activities. Five of the Special Study
and Activity Guides

CHAPTER V

THE UNIT ORGANIZATION OF THE TOPIC, SCULPTURE

The Second Unit is a Revision of the First Unit ^{1/}

The Second Unit

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ten Special Study and Activity Guides; and forty-six Optional Related Activities. Five of the Special Study and Activity Guides are in the first unit.

Twelve new Special Study and Activity Guides are added to the ten found in the second unit.

The thirty-one Optional Related Activities are chosen from those of the second unit. Ten of these are changed in some detail.

The reference material.-- The book, Sculpture Inside and Out, is added to the list used in the second unit.

Additional reference material.-- This reference material was left for two weeks at each room.

An experiment.-- The pupils of Mrs. Sawyer's and Miss Sinclair's classes were asked to write the reasons for their choices of subject. The pupils of the other two classes made their choices orally. History and geography furnished the source material for the selections.

A comparison of the photographs of the models does not give an indication of the difference between the two groups, since the models from Mr. Curtis's class compare very well with those of the experiment classes.^{1/}

However, the pupils in Mrs. Sawyer's class became so interested in their work that they came to school early for the sole purpose of having an extra time for modeling.

^{1/} See Appendixes, I, K, L, and N.

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See appendices I, K, L, and N.

The models made in this room were the best as a group.

The written method requires clearer thinking and definitely stimulates a better start.

Desirable references.--- These books, with the exception of the two by Mrs. Hoffman are to be found in the children's room of the Boston Public Library. If one could not have the entire list, numbers 1 or 2, 4, 5, 6, 7, and 12 would provide for a good range of reading level as well as for a variety of emphasis. All art books are more expensive than reading books.

The total number of individuals who were the best of...

The number of individuals who were the best of...

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EFFICIENCY BOND

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A. B. & C.

EFFICIENCY

CHAPTER VI

THE UNIT ORGANIZATION OF THE TOPIC, SCULPTURE, FOR THE SEVENTH GRADE (REVISED)

The Unit

Sculpture is an important means of expression as well as a vocation. A better understanding of how a sculptor works and develops ideas in materials will show how valuable a contribution this can be to democracy.

Delimitation of the Unit

1. "Sculpture implies a statement made in terms of mass about some significant phase of life....It should be the sculptor's aim to express his ideas forcefully and truthfully rather than to reproduce the appearance of nature."^{1/}
2. [The value of sculpture depends upon its use and the message it gives rather than upon the greatness of the age in which it is made.]^{2/}
3. Most sculpture tells something about the people who made it. Religion, customs, government, family,

^{1/} Thomas Munro and Others, Art In American Life And Education, The Fortieth Yearbook of the National Society for the Study of Education, (p. 208). Bloomington, Ill.: Public School Publishing Co., 1941.

^{2/} Ibid., p. 212. and Olive L. Riley, op. cit., p. 222.

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2/ Ibid., p. 212.

costume, ideals, geography, freedom, and slavery are but a few of the areas described in sculpture.

4. Carving and modeling have existed almost since the beginning of history. There is a certain similarity between objects made by different races.

5. [Purpose should influence sculpture.] "Sculpture for indoors should be simple in contour. Sculpture for outdoors should have a strong contour that is effective at a distance....Architectural sculpture--must be adapted to....the architectural plan."^{1/}

6. "Sculpture may represent an event but not reproduce any of the particular models. For example, the Shaw Memorial in Boston, by Augustus Saint-Gaudens."^{2/}

7. Clay, stone, wood, ivory, soap, plastics, linoleum, plaster of Paris, ice, precious stones, glass, and metal are a few of the sculptor's materials. Each demands special tools and methods. [Hard materials require that the sculptor work in from the outside. He can only cut away. The sculptor must build from the inside out with soft materials.]^{3/} The sculptor must have respect for his medium. [material]^{4/}

^{1/} M. Rose Collins and Olive L. Riley, Art Appreciation for Junior and Senior High Schools, p. 221. New York: Harcourt and Brace Company, 1931.

^{2/} Thomas Munro, op. cit., p. 209.

^{3/} M. Rose Collins and Olive L. Riley, op. cit., p. 222.

^{4/} Thomas Munro and Others, op. cit., p. 213.

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¹ M. Rose Collins and Olive L. Riley, Art Appreciation for Junior and Senior High Schools, p. 221. New York: Harcourt and Brace Company, 1931.

² Thomas Munro, op. cit., p. 209.

³ M. Rose Collins and Olive L. Riley, op. cit., p. 222.

⁴ Thomas Munro and Others, op. cit., p. 215.

8. 1 A sculptor may express his ideas in the way he makes his work.^{1/}
 9. "Sculpture of all of the finest periods is characterized by restraint, dignity, and repose....It conveys a feeling of permanence, self-control, and quiet beauty."^{2/}
 10. The works of important sculptors are valuable because they add beauty and understanding to community, national and world living. Augustus Saint-Gaudens, Daniel Chester French, Cyrus E. Dallin, and Gutzon Borglum are a few of the American sculptors. The first three worked in New England.
 11. There are abundant examples of modeling and carving in public buildings, cemeteries, stores, theaters, stone sheds, and homes.
 12. Monument making is Barre's principal industry. Among the many occupations represented are drafting, sand-blasting, stone cutting, modeling, tool sharpening, pattern making, letter designing, and stencil cutting.
 13. Barre's two cemeteries are considered to have some of the best sculpture in the United States.
 14. An excellent granite statue of Robert Burns stands on the high school lawn. It was carved by Elia Corti, an Italian who came to Barre. He carved the statue
- 1/ Thomas Munro and Others, op. cit., p. 209.
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15. M. Rose Collins and Olive L. Riley, op. cit., p. 231.

- and the panels on the base. A Mr. Novelli of Novelli and Calcagni "roughed out" the statue first. The statue is about life size.
15. An excellent nude youth granite war memorial is in the city square. It is heroic or larger than life size. The statue lacks suitable background. The fact that it was made by non-union workers from Canada has made it distasteful to the stonecutters in the past.
16. Everyone should have the opportunity to model and to carve. Exploration in these skills may suggest a vocation. Modeling and carving are both worthwhile leisure-time hobbies.
17. Three-dimensional design is used in industry. [An object designed for industry] "must meet three needs: (1) It must be of service to the community or the individual; (2) It must be made of some durable material; (3) It must possess beauty of proportion, outline, and color."^{1/}
18. A sculptor always plans his work. Often he designs it on paper or makes a smaller model. Planning requires that the sculptor think of many views of his work. [A beginner plans from four views as the Egyptians did. A student sculptor uses eight views. An
- ^{1/} William H. Varnum, Industrial Arts Design, p. 9. Peoria, Illinois: Manuel Arts Press, 1916.

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19. William H. Verbrug, Industrial Arts Design, P. 9. Boston, Illinois: Manual Arts Press, 1916.

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19. "Design is the arrangement in a work of art; it establishes the proportion of the parts to the whole and to each other; it places them in relation to each other, and creates a pattern^{2/}. Design has rhythm or movement and balance...." ^{2/} Good design should have variety. This means ^{3/} "differences in line, in mass and in order".^{3/}
- a. "Line means outline or contour. There are ^{4/} straight lines, curved lines....lines of actionand lines of direction."^{4/}
- b. "Rhythm means a unison of movement."^{5/}
- c. Proportion means comparison of measure. A figure is seven and a half heads tall in comparison to two heads wide through its widest part, the shoulders. A horse is about as tall as he is long. Sculpture may be of large or small proportion when it is contrasted with its surround-

^{1/} Rebecca Holliday, Art Supervisor in Hingham, Mass.

^{2/} Leon L. Winslow, The Integrated School Art Program, p. 353. New York: McGraw Hill Book Company, Inc., 1939.

^{3/} State Department of Education, Montpelier, Vermont, Suggested Course of Study and Teacher's Manual for Art Education, Grades I-VIII, p. 60. Montpelier, Vermont: Issued by authority of the State Board of Education, 1943.

^{4/} Ibid., 6. 61.

^{5/} William H. Varnum, op. cit., p. 15.

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4. Ibid., p. 61.

5. William H. Varnum, op. cit., p. 12.

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"Proportions are generally expressed in terms of ratio. A surface of five by eight inches would give a ratio of five by eight." ^{1/}

d. Sculpture is made up of planes or flat surfaces.

It is the size and the position of the planes that makes the sculpture. Modelling stand with a

20. [Sculpture that is raised a little from the background, ^{2/} "is known as low relief, or bas-relief".

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^{1/} M. Rose Collins and Olive L. Riley, op. cit., p. 223.

^{2/} Ibid., p. 223. [is securely fastened together and a

^{3/} Albert Toft, Modelling and Sculpture, p. xiii. London: Seeley, Service & Co., Limited, 196 Shaftesbury Avenue, 1929.

^{4/} Ibid., p. 73-74.

^{5/} Ibid., pp. 72-73.

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2 Ibid., p. 225.

3 Albert Gott, *Modeling and Sculpture*, p. xiii. London: Seeley, Service & Co., Limited, 190 Shafesbury Avenue, 1929.

4 Ibid., p. 73-74.

5 Ibid., pp. 73-75.

easily changed than iron or wood.^{1/} Wooden lathes, iron rods, wire screening, wooden boards four and six inches wide are often used in large armatures. The armature helps to make the sculpture lighter since it substitutes for part of the clay.

c. The armature is placed on a modeling stand with a revolving top. Thus the work may easily be brought into good light.

23. Clay sculpture dries and cracks with age. It may be reproduced or changed into permanent forms. Each process requires skilled workmen, and special tools and equipment.

a. A clay sculpture may be hollowed out to a uniform shell and fired in a kiln to make terra-cotta.^{2/}

b. Clay sculpture may be reproduced in plaster of Paris. Plaster of Paris is splashed on the clay in successive layers. The first layer is usually tinted. The mold is made in sections separated by metal or clay. When the mold is removed, it is often necessary to destroy the clay sculpture.

The mold is securely fastened together and a fresh mixture of plaster of Paris is poured into

^{1/} Albert Toft, op. cit., pp.135-151. for a careful ac-

^{2/} Ibid., for a careful ac-

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V. Albert Fort, op. cit., pp. 122-121.

2. Imb. 2

the mold in successive amounts. The mold is rolled to make sure that the mixture reaches every space. When the sculpture has dried, the mold is chipped away. The tinted layer serves as a warning to the worker that he must chip more carefully. The finished sculpture is just beyond the tinted layer.

- c. Sculpture may be reproduced in bronze by several processes.

Probable Indirect and Incidental Learning Products

1. A clearer understanding that:

- a. Man is as great as is his understanding and concern for his fellow-men.
- b. The expression of a great man is centered upon the big things for which all countries are striving.
- c. Man needs beauty and inspiration in his daily surroundings to keep him closer to democracy.
- d. Men in the stone sheds in Barre work to make monuments that are beautiful and inspirational.
- e. Truth and honesty are as important in sculpture as they are in buying and selling.
- f. Skill is acquired by intelligent, persistent labor.
- g. Everyone can enjoy fine sculpture.
- h. We must be alert to the need for a careful selection of sculpture for our city and the choice

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h. We must be alert to the need for a careful se-

lection of sculpture for our city and the choice

of the background must be suitable.

A. Introduce Tentative Time Allotment

- * Sculpt fifteen 50-minute periods. something important in a permanent material.
- * The teacher discusses the following questions with the class.
 - What does sculpture mean to Barre?
 - What does sculpture mean to you who will be Barre's citizens?
 - What materials are used in sculpture?
 - What tools are used to make the sculpture?
 - Where can we find information about tools and materials?
- * The teacher distributes the general study and activity guide sheets and explains the uses of the special study and activity guides.

B. Laboratory Work.

1. The numbers following a question refer to the reading list. For example, (5:64) means that in the fifth book on page 64 you will find some help with this problem. O.R.A. means that you might be interested in the Optional Related Activity that refers to this problem. S.S.G. means that there is a Special Study and Activity Guide for

* All items marked with an asterisk indicate teacher activity.

of the background must be suitable.

Tentative Time Allocation

fifteen 30-minute periods.

The Unit Assignment

A. Introduction.

* Sculpture is a means of saying something important in a permanent material.

* The teacher discusses the following questions with the class.

What does sculpture mean to Barre?

What does sculpture mean to you who will be Barre's citizens?

3. What materials are used in sculpture?

What tools are used to make the sculpture?

4. Where can we find information about tools and materials?

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* All items marked with an asterisk indicate teacher activity.

that problem.

2. Read the problems and activities in the general study guide, the Special Study and Activity Guides, and the Optional Related Activities which are on cards in a file. Have you an activity or problem which you feel is not included? Write it down on a card and ask the teacher about it. If she considers it worth while you may do it in place of one that is listed.
3. What are the tools and materials of a sculptor who works in stone? (5:64).
4. What are the tools and materials of a sculptor who works in clay? (11:11, 25, 36, 39, 45, 55).
5. Does a sculptor carve a bronze statue?
- * The movie Clay to Bronze is shown. This movie will answer questions concerning modeling and casting. Be careful to observe tools and materials. Try to separate modeling, plaster casting and bronze casting into simple steps that you can remember.
- * The class and teacher study the list of suggestions, the Special Study and Activity Guides, and the Optional Related Activities.
6. Choose one of the following activities. The others will be regarded as Extra Optional Related

Activities.

- a. Model a small toy or animal. S.S.G. No armature.
 - b. Model dishes. S.S.G.
 - c. Model an animal. S.S.G. Use an armature.
 - d. Model a figure. S.S.G. Use an armature.
 - e. Model a head. S.S.G. Use an armature.
 - f. A group may model a combination of the above suggestions to make a scene.
 - g. Model a building. S.S.G. A group could make a group of buildings.
 - h. Model a tile. S.S.G. A group can make a series of tiles.
7. What is the difference between high relief, low relief (bas-relief), and a full sculptured statue? (11:31, 32, 35, 39, 47, 49, 45), (12:15, 23, 29, 65, 73, 80).
- a. See the panels on the Robert Burns monument or the bronze door on the mausoleum in Elmwood Cemetery.
- * The teacher displays pictures and illustrates that bas-relief or low relief is slightly raised from the background. High relief is almost free from the background and middle relief is halfway between.

Activities.

a. Model a small toy or animal. S.S.G. No

armature.

b. Model dishes. S.S.G.

c. Model an animal. S.S.G. Use an armature.

d. Model a figure. S.S.G. Use an armature.

e. Model a head. S.S.G. Use an armature.

f. A group may model a combination of the above

suggestions to make a scene.

g. Model a building. S.S.G. A group could

make a group of buildings.

h. Model a life. S.S.G. A group can make a

series of lifes.

7. What is the difference between high relief, low

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(11:31, 32, 35, 39, 47, 49, 45), (12:12, 23, 29,

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or the bronze door on the mausoleum in Elm-

wood Cemetery.

* The teacher displays pictures and illustrates

that bas-relief or low relief is slightly raised

from the background. High relief is almost free

from the background and middle relief is halfway

between.

- * The teacher reviews the facts about good design within a given area. The teacher draws rectangles on the blackboard and demonstrates various divisions of space. The following points are made.^{1/}
8. What is the foundation of a good design within a given area?
 - a. The design will be balanced.
 - b. Free balance divides the space unevenly.
 14. What The main lines are above or below the center, or they are to the right or the left of the center.
 15. c. Axial balance is a kind of design in which the right side is a repetition of the left side in reverse.
 16. d. Central balance is an alternation or a repetition around a center.
 17. e. The type of lines used within the design should be consistent with the design.
 - f. The design should fit the shape.
 - g. There should be a variety of shapes, sizes, and lines that are arranged to look well together.
9. What is an armature? O.R.A. What materials

^{1/} All of the drawings in the first unit would be used in this one.

are needed to make one for a figure, an animal, and a head? S.S.G.

10. What type of support is needed for a head? hands

S.S.G. (11:37). a little over half-way between

11. What type of support is needed for a figure or an animal? (11:63). is about seven and one-

12. How does one prepare for a tile? S.S.G.

13. How can the wire be enlarged to make a core or a cage? S.S.G. largest part of the upper arm

14. What can you bring from home that could be used to protect the top of your desk when you model? wrist is one head wide (front view).

15. Could you make some modeling sticks out of Cheerio sticks, old pen holders and wire? Here is an opportunity for sharing.

16. What information will help you to draw plans?

17. Fill in partially drawn skeletons and add the proportions.^{1/}

* The teacher should review figure proportion with the class. The teacher should make drawings on the blackboard. (front and side view).

O. R. A.'s eyes are just above the center; a

a. The figure has three big divisions that are approximately equal. These are:

^{1/} Rebecca Holliday, Supervisor of Art, Hingham, Mass., suggested the "partially drawn" idea, before we drew them in class.

are needed to make one for a figure, an animal,

and a head? S.S.G.

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a. The figure has three big divisions that

are approximately equal. These are:

I. Rebecca Holliday, Supervisor of Art, Hingham, Mass., suggested the "partially drawn" idea, before we drew them in class.

shoulder to hip, hip to knee, and knee to feet.

b. Elbows should be at the waist, and the hands should fall a little over half-way between the hip and the knee.

c. The adult figure is about seven and one-half heads tall.

d. The shoulders are about two heads wide through the largest part of the upper arm.

e. The hips are about one and one-half heads wide.

f. The waist is one head wide (front view).

* The teacher should review the proportions of the head and make drawings on the blackboard. (front and side view).

a. The head is shaped like an egg. It is divided into four equal parts. These are: top of head to hair line, hair line to eyes, eyes to nose, nose to chin.

b. It is three-quarters as wide front view as it is side view.

c. A man's eyes are just above the center; a woman's eyes are below the center; and a baby's eyes are on the center.

d. The width of the end of a man's nose equals

- shoulder to hip, hip to knee, and knee to foot.
- b. Elbows should be at the waist, and the hands should fall a little over half-way between the hip and the knee.
- c. The adult figure is about seven and one-half heads tall.
- d. The shoulders are about two heads wide through the largest part of the upper arm.
- e. The hips are about one and one-half heads wide.
- f. The waist is one head wide (front view).
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- b. It is three-quarters as wide front view as it is side view.
- c. A man's eyes are just above the center; a woman's eyes are below the center; and a baby's eyes are on the center.
- d. The width of the end of a man's nose equals

- the width of his eye.
- e. A negro's eye is wide and the end of his nose is wider.
 - f. See diagrams on sheets for Modeling A Head for other equal parts.
 - g. One-third of the face, from the top of the nostril to the chin, equals the distance from the chin to the breast bone.
18. Fill in the partially made drawings of the head. Add information about proportion.^{1/}
19. What makes sculpture good?
- a. Does it say something about an important part of life?
 - b. Does it state the idea in a strong manner?
 - c. Is the idea more important than when the statue was made?
 - d. Is it placed in an appropriate place?
20. Do you know the Lincoln statue of Lincoln Park, Chicago? (15:20-21) O.R.A. Where do you think Lincoln was supposed to be? What is he doing? Who made the statue? What is the material?
21. Special assignment for one student. Read about Augustus Saint-Gaudens and be prepared to give a brief talk. S.S.G. (25:494, 495, 496-499).

^{1/} Rebecca Holliday, loc. cit.

a brief talk. S.S.G. (22:49, 49, 49-49).

Augustus Saint-Gaudens and he prepared to give
21. Special assignment for one student. Read about
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for other equal parts.

f. See diagrams on sheets for Modeling A Head

nose is wider.

e. A negro's eye is wide and the end of his

the width of his eye.

Ask the teacher about it. *should be shown.*

22. Do you know the Lincoln statue of the Lincoln Memorial in Washington, D. C.? (15:20-21).O.R.A.

a. Who made it? *came to represent in this*

b. What material was used? *idea?*

c. Why should this statue be in Washington, *idea*

D. C.?

d. What does it tell you about Lincoln? *statue*

e. What would it mean to someone from another country? *Lincoln, our Civil War president was*

23. Special assignment for one student. Read about Daniel Chester French and be prepared to give a brief talk. English, History. Ask the teacher about it. *idea in it.*

24. What is the position of the Lincoln Statue by Gutzon Borglum? (15:20-21) (5:63).

25. Special assignment for one student. Read about Gutzon Borglum and be prepared to give a brief talk. S.S.G. (5:64). Ask the teacher about it.

26. What is Lincoln supposed to be doing in the Max Kalish statue? (23:12-15, 28).

27. Special assignment for one student. Read about Max Kalish (23:12-15, 28) and be prepared to give a brief talk. Ask the teacher about it.

* The teacher discusses the four Lincoln statues

Ask the teacher about it.

22. Do you know the Lincoln statue of the Lincoln Memorial in Washington, D. C.? (15:20-21). O.R.A.

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* The teacher discusses the four Lincoln statues

with the class. Pictures should be shown.

What do the Lincoln statues tell us about Lincoln?

What has Lincoln come to represent in this country and in other countries?

Why should we have statues of him and of others like him?

What kinds of lines do you see in the statues?

- * Would you say that a good statue appeared to be simple? Lincoln, our Civil War president was a thoughtful and kind man. He believed in the abolishment of slavery.

His Gettysburg Address defines democracy and his beliefs in it.

Other countries know Lincoln for his belief in humanity and democracy.

The long lines of the statues are broken at uneven intervals to add interest. Some of the lines flow into each other.

The planes which make up the flat surfaces help one to see the statue.

- 28. The four special talks on Lincoln could be given at this time, in an English class, in a History class, or in the summary at the end of the unit.
- 29. Do you know the statue of the Minute Man by

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at this time, in an English class, in a History

class, or in the summary at the end of the unit.

29. Do you know the statue of the Minute Man by

Daniel Chester French? (5:63)

What was it made to represent?

Where have we used a picture of it recently?

What material is used?

30. Special assignment for one student. Read about Daniel Chester French and be prepared to give a brief talk. S.S.G. Ask the teacher about it.

31. Do you know the statue "Appeal to the Great Spirit" by Cyrus E. Dallin? (5:63) O.R.A.

What is the material?

What does the statue represent?

Is this activity an important part of all men's lives?

Why should there be a statue of an Indian in Boston?

32. Special assignment for one student. Read about Cyrus E. Dallin and be prepared to give a brief talk. S.S.G. Ask the teacher about it.

33. Do you know the statue of Paul Revere by Cyrus E. Dallin? See clippings in file.

What material is used?

What particular activity does it represent?

Why is Paul Revere important to Boston and to America?

Do you know the story of the statue?

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Do you know the story of the statue?

- * The teacher discusses the three statues and displays pictures.

Other pictures of Indian statues by Dallin could be shown at this time.

Why should Americans be interested in fine statues of Indians?

What do these statues tell us about them?

Do these statues meet the requirements of design and purpose?

When Indians have had the opportunities of white men, are they able to develop as he has?

What did Paul Revere do for a living?

Is the spirit of early American democracy expressed in the two statues of colonial men?

35. Indians were here before we came to this country. There are many still here. Those who have had opportunity have advanced with white men.

The Dallin statues show us Indians who are not unlike white men in their sincerity and strong character. We should make further provisions for their education and development.

Paul Revere was an outstanding patriot, silversmith and potter. Today we need men with wide interests to work for our country.

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Paul Revere was an outstanding patriot, silver-smith and potter. Today we need men with wide interests to work for our country.

Both colonial figures seem to show that these men were active in the interests of their country. They show a concern for the group in which they live.

- * The teacher discusses the kind of line and balance to be found in the statues.

34. Who made the Robert Burns monument?
 - a. Why should Barre have such a statue?
 - b. What does it say to you?
 - c. Who was Robert Burns and what does he represent?
 - d. Is the figure about life size?
 - e. Do the lines look well together? Are they a part of the structure?

35. Who made the Youth Triumphant War Memorial?

36. Use the questions in 34. Omit c. Add the following:

37. a. What is the difference between a portrait and a statue that is supposed to represent all American youth?
38. b. Compare the backgrounds of the two statues.

- * The teacher briefly discusses the two statues with the class.

39. The following conclusions should be made.

- a. A large group of Barre men and women came

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The following conclusions should be made.

a. A large group of Burns men and women came

41. What from Scotland. Robert Burns, a Scottish poet, is loved by the people because he showed his understanding and love for them in his poetry. He did for the home what Lincoln did for democracy. A home is an important part of a democracy.
42. Be b. The Youth must look like the best of all youth. He must look determined and inspired.
43. Mode c. The Youth is heroic size while Robert Burns is life size. The background for the Burns monument is adequate, while that of the other is lacking in size and quality.
44. What (Due to a lack of time, this talk was omitted.)
45. A 36. Why do many statues have thin clothing or very little clothing?
46. A 37. Does the style of clothing change very often?
47. A 38. Is some modern clothing worthy of being made permanent in stone, bronze, or plastics?
48. A 39. What country believed that its gods and goddesses were like human beings only more perfect?
49. A O.R.A. What is one instrument that is used to help
50. A 40. Do proportions and parts of the human figure change very much from year to year?

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permanent in stone, bronze, or plastic?

39. What country believed that its gods and goddesses were like human beings only more perfect?

C.R.A.

40. Do proportions and parts of the human figure

change very much from year to year?

41. What should help you to appreciate the beauty of line and proportion to be found in the human figure?
42. Be prepared to discuss questions 31, 32, 33, 34, 35, and 36 with the teacher.
43. Modeling is a case of building the statue from the inside out. How does one work in carving?
44. What can be done if a mistake is made in modeling? Can this be done in carving?
45. What do stone sculptors use for models when they carve a monument? (26:159).
46. A group of you who are especially interested will be selected to work on the next three problems.
 - a. What is one instrument that is used to help a sculptor to make an exact copy of the model? Letter in clean sentences a brief description of how it is used. (26:158-159). If possible visit a stone shed where there is such an instrument. Use oak tag 6 by 8 inches. Ask the teacher for this reference.
 - b. What is one instrument that is used to help a sculptor reduce or enlarge his work? Letter in clear sentences a brief descrip-

41. What should help you to appreciate the beauty of line and proportion to be found in the human figure?
42. Be prepared to discuss questions 31, 32, 33, 34, 35, and 36 with the teacher.
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45. What do stone sculptors use for models when they carve a monument? (26:159).
46. A group of you who are especially interested will be selected to work on the next three problems.
- a. What is one instrument that is used to help a sculptor to make an exact copy of the model? Letter in clear sentences a brief description of how it is used. (26:158-159). If possible visit a stone shed where there is such an instrument. Use oak tag 6 by 8 inches. Ask the teacher for this reference.
- b. What is one instrument that is used to help a sculptor reduce or enlarge his work? Letter in clear sentences a brief descrip-

tion of how it is used. Choose the proportional dividers. (26:283). They are sometimes called proportional calipers. Could you borrow a pair to exhibit for a day?

53. Use oak tag 6 by 8 inches. O.R.A. Ask the teacher for this reference.

c. Make drawings or mount pictures of the two instruments. Letter the name on the front of the card. See S.S.G. on mounting pictures.

55. (Use oak tag 6 by 8 inches.)

d. Be prepared to give a three minute talk explaining the two instruments. Use pictures and information.

(Due to a lack of time the talk was omitted.)

47. Why is soap suggested for carving?

48. Why are coarse grain laundry soaps, used soap, and round or oval shaped soaps undesirable for carving? (12:16). S.S.G. on Soap Carving.

49. Have you carved in some other material? Is it available to you?

50. You may use it in place of the soap. Talk with your teacher about your materials.

51. How many views must be drawn as plans for a carved article? S.S.G. (12:18, 26, 28, 30).

52. Make a carving in soap. People, animals, build-

tion of how it is used. Choose the propor-
tional dividers. (26:283). They are some-
times called proportional callipers. Could
you borrow a pair to exhibit for a day?
Use oak tag 6 by 8 inches. O.R.A. Ask the
teacher for this reference.

- c. Make drawings or mount pictures of the two
instruments. Letter the name on the front
of the card. See 8.8.G. on mounting pic-
tures. (Use oak tag 6 by 8 inches.)
- d. Be prepared to give a three minute talk
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tures and information.

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- 47. Why is soap suggested for carving?
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available to you?
- 50. You may use it in place of the soap. Talk with
your teacher about your materials.
- 51. How many views must be drawn as plans for a
carved article? 8.8.G. (12:18, 26, 28, 30).
- 52. Make a carving in soap. People, animals, build-

ings, bas-reliefs, furniture, and small articles can be made. Two cakes may be used together to make a larger one. See S.S.G. lists for suggestions. movies, and drawings to select that part

53. A group of students may make their carvings for a scene, a shadow box, (12:46) or a frieze of bas-reliefs. See S.S.G. lists. the action

54. Think of the fine statues you have seen. What makes them have dignity? having fine sculpture

55. Why do the most beautiful statues seem very simple? expression of truth, good-will, justice,

56. How can a statue have action and still be dignified? (5:52, 54, 61, 64). opportunity for de-

(Due to a lack of time the following discussion was omitted.) government?

* The teacher shows a series of pictures (26:211, 219, 225, 250) and discusses the possibility of action in sculpture.

Q. Summary * What has design and balance to do with action?

* How does an artist select the action that he will use? important activities and optional related activities

* What is used as a complement to real models?

* The teacher explains that action in sculpture is limited, by the material and design or balance. A large statue that has a slender base

ings, bas-reliefs, furniture, and small articles can be made. Two cakes may be used together to make a larger one. See S.S.G. lists for suggestions.

53. A group of students may make their carvings for a scene, a shadow box, (12:46) or a frieze of bas-reliefs. See S.S.G. lists.

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55. Why do the most beautiful statues seem very

simple?

56. How can a statue have action and still be dig-

nified? (5:52, 54, 61, 64).

(Due to a lack of time the following discussion

was omitted.)

* The teacher shows a series of pictures (26:21,

219, 222, 250) and discusses the possibility of

action in sculpture.

* What has design and balance to do with action?

* How does an artist select the action that he

will use?

* What is used as a complement to real models?

* The teacher explains that action in sculpture

is limited, by the material and design or bal-

ance. A large statue that has a slender base

is usually made of metal because it is strong.

Such statues are usually hollow.

* An artist studies models, photographs, slow-motion movies, and drawings to select that part of the action that really tells the story.

* As we know the statue must be harmonious and balanced within itself. Sometimes the action is changed slightly to fit the design.

57. What are two reasons for having fine sculpture in any community?

58. Is the expression of truth, good-will, justice, and cooperation a part of our idea of democracy?

59. Do sculptors have a greater opportunity for developing these ideas in a democracy than in any other form of government?

60. Write a brief summary of what you have learned in this study. Use one side of a sheet of composition paper.

C. Summary:

There will be a program of several periods in which important activities and optional related activities will be shared with the class. There will be an opportunity for questions.

There will be a multiple-choice test.

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U. Summary:

There will be a program of several periods in which
important activities and optional related activities
will be shared with the class. There will be an
opportunity for questions.

There will be a multiple-choice test.

Code to Available Study Guide References

Code No.

1. Beck, Charles F. "Figures Without Clay". School Arts, 44 (February, 1945), pp. 202-203.
The figures are made with rolls of newspapers. Good photographs accompany a clear description of "how to do it". Student level.
2. Benda, W. T. "Masks-Most Ancient of Arts". American Artist, 8 (January, 1944), pp. 23-25.
This has excellent information for the teacher, describes historic and modern uses. Tools and materials are listed. Excellent photographs of eight masks.
3. Bridgeman, George B. Constructive Anatomy, pp. 11-213, Pelham, New York: Bridgeman Publishers, 1928.
The drawing is superior. The excellent information is rather technical.
4. Casner, Mabel B., and Gabriel, Ralph H. The Story of American Democracy, New York: Harcourt, Brace and Company, 1943, pp. v+632.
5. Clark, Guy Gaylor, and Truex, Van Day. "Taste--Is It Dynamite?" Craft Horizons, 3 (February, 1944), pp. 4-8.
There are excellent photographs (7" x 8") of glass, pewter, and bronze. The brief comments under each cut are superior.
6. Compton's Picture Encyclopedia and Fact Index Vol.13. Chicago: F. E. Compton & Company, 1944. pp.52-62.
The text gives brief but important facts. The photographs are clear and examples of sculpture well chosen.
7. Cook, Floyd. School Arts, 43 (October, 1943), pp.41-45.
Excellent photographs of modeling. The text is excellent but too technical.
8. de Lemos, Pedro. "Zuni Hunt Fetishes". School Arts, 43 (November, 1943), pp. 86-89.
The article has excellent photographs of stone animals and pottery.

Code No.

1. Beck, Charles F. "Figures Without Clay". School Arts, 44 (February, 1945), pp. 202-205. The figures are made with rolls of newspaper. Good photographs accompany a clear description of "how to do it". Student level.
2. Bonds, W. T. "Masks-Most Ancient of Arts". American Artist, 8 (January, 1944), pp. 23-25. This has excellent information for the teacher, describes historic and modern uses. Tools and materials are listed. Excellent photographs of eight masks.
3. Bridgman, George B. Constructive Anatomy, pp. 11-215. Pelham, New York: Bridgman Publishers, 1928. The drawing is superior. The excellent information is rather technical.
4. Ganser, Mabel B., and Gabriel, Ralph H. The Story of American Democracy. New York: Harcourt, Brace and Company, 1945, pp. v-632.
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6. Gompton's Picture Encyclopedia and Fact Index Vol. 13. Chicago: F. E. Gompton & Company, 1944, pp. 52-62. The text gives brief but important facts. The photographs are clear and examples of sculpture well chosen.
7. Cook, Floyd. School Arts, 45 (October, 1945), pp. 41-42. Excellent photographs of modeling. The text is excellent but too technical.
8. de Lamos, Pedro. "Zuni Hunt Fetiches". School Arts, 45 (November, 1945), pp. 86-89. The article has excellent photographs of stone animals and pottery.

9. de Lemos, Pedro. "Primitive Arts, False and True".
School Arts, 43 (November, 1943), pp. 74-76.
 Excellent photographs of primitive pottery and primitive wood-carving.
10. de Lemos, Pedro. "Indian Art Craft of the Northwest".
School Arts, 43 (November, 1943), pp. 90-91.
 The photographs of slate-carving and wood-carving are excellent.
11. de Lemos, Pedro. "Carving is Fun". School Arts, 43
 (September, 1943), pp. 24-27.
 The excellent, informative photographs show how to carve a figure in plastic material. The information is good.
12. Dunn, Ione. "The Principles of African Art". School Arts, 43, (November, 1943), pp. 102-105.
 The excellent information is for the teacher. The photographs of wood-carving are equally good. There are photographs and drawings of chairs.
13. Ellis, Clifford, and Rosemary. Modelling for Amateurs.
 New York: The Studio Publications, Inc., 381 Fourth Avenue, 1944., pp. 7-79.
 The photographs give excellent information. There is an excellent description of the procedure in modeling, the making of casts, and the making of wire and paper figures. Information is given explaining good examples of ancient modeling and sculpture. A seventh or eighth grade student can read it.
14. Gaba, Lester. Soap Carving. New York: The Studio Publications, Inc., 381 Fourth Avenue. No date given. 8-79 pp.
 The photographs and the text are excellent. The patterns are for the beginner. The descriptions and photographs are for the advanced worker. A seventh or eighth grade student can read it.
15. Glickman, Maurice. "A Sculptor's Views On Wood-Carving". American Artist, 7 (November, 1943), pp. 13-16.
 This article has: eight excellent photographs showing steps in wood-carving, and five photographs of sculpture in bronze, marble, plaster, and cast stone. The information includes materials and procedures, but it is for college level.

16. Harvard Film Service. "Clay to Bronze." (3 reels silent), Johnson High School, Stowe, S. Burlington. This is an old but an excellent movie. It shows all of the important steps of making a statue in clay, plaster of Paris and bronze. It takes about an hour. This includes time required for changing the film.
17. Hoftman, Malvina. Sculpture Inside and Out. New York: W. W. Norton & Co., 1939, 7-330 pp. An excellent source book. Many large photographs and fine drawings. The tools, materials, and processes required for modeling, carving, plaster-casting, bronze sculpture and enlarging, are carefully covered. All the steps between the quarry and the finished product are included in the section on stone. There is a brief history of sculpture in the front. (Property of the Art Supervisor).
18. "How Many of These Lincoln Statues Do You Recognize?" The Highway Traveler, 16 (December, 1944-1945), pp. 20-21, 34. There are nine good photographs of statues of Lincoln. Weiman, Bell, Marnard, French, Saint-Gaudens, and Borglum are the sculptors.
19. Harris, Joe. "Indian Lore and Customs". School Arts, 43 (November, 1943), pp. 94-97. The information is suitable for the seventh or eighth grade. The photographs of masks from Java, Sumatra, the Solomon Islands, Congo Africa, and Guatemala are excellent.
20. Jaeger, Ellsworth. "The Way of the False Face". School Arts, 43 (November, 1943), pp. 92-3. This is an excellent, compact, survey of the mask from Egyptian times to those of the American Indian. There are good black and white drawings. The information is for college level.
21. Nichols, Edith L., School Arts, 43, (June, 1944) pp. 345-346. Directions for making soap plastic.
22. Powell, Doane. "How To Make Masks". Art Instruction, 3 (December, 1939), pp. 20, 30. Clear, and adequate instructions are given for making a mask. There is one good photograph. The information can be read by an eighth grade student.

23. Spinden, Herbert J. "Mask Magic". Art Instruction, 43 (December, 1939), pp. 21-23.
The article is on college level. The excellent photographs show ten kinds of masks.
24. Todd, Jessie Lee. School Arts, 43 (June, 1944), pp. 339-340.
A picture of a woman carving, and a picture of a carved child and cat.
25. "It All Started With Blue". American Artist, 4 (April, 1940), pp. 14-16.
Two of the excellent photographs show steps in modeling. Three photographs are of glazed terracotta. The text tells how the artist began his work.
26. "The Sculpture of Joseph Colletti". American Artist, 8 (February, 1944), pp. 8-11, 25.
The excellent photographs are of stone sculpture. The text is for college level.
27. "Water-carrier". American Artist, 4 (February, 1940), p. 27.
This is an excellent photograph of a bronze statue by Max Kalish. It is 5 5/8 by 9 1/2 inches.
28. Watson, Ernest W. "Max Kalish". American Artist, 9 (January, 1945), pp. 12-15, 23.
There is an excellent description of how the sculptor planned and executed "The Living Hall of Washington 1944", and "Lincoln at Gettysburg". The information is in professional language. There are seven excellent photographs.
29. "Edmond Amateis and His Sculpture for the Philadelphia Post Office". American Artist, 4 (December, 1940), pp. 4-8.
There are sixteen excellent photographs of clay panels. There is an excellent photograph of a cast of a panel. The professional information explains how an artist plans such a project.
30. Sauerbrel, Claude. "Banchi, Beautiful And Eternal". Asia, 42 (February, 1942), pp. 100-102.
Excellent photographs of relief carving.

23. Spindler, Herbert J. "Mask Magic". Art Instruction, 43 (December, 1939), pp. 21-23. The article is on collage level. The excellent photographs show ten kinds of masks.
24. Todd, Jessie Lee. School Arts, 43 (June, 1944), pp. 339-340. A picture of a woman carving, and a picture of a carved cliff and cave.
25. "It All Started With Blue". American Artist, 4 (April, 1940), pp. 14-16. Two of the excellent photographs show steps in modeling. Three photographs are of glazed terra cotta. The text tells how the artist began his work.
26. "The Sculpture of Joseph Colletti". American Artist, 8 (February, 1944), pp. 8-11, 25. The excellent photographs are of stone sculptures. The text is for collage level.
27. "Water-carrier". American Artist, 4 (February, 1940), p. 27. This is an excellent photograph of a bronze statue by Max Kallish. It is 2 5/8 by 9 1/2 inches.
28. Watson, Ernest W. "Max Kallish". American Artist, 9 (January, 1943), pp. 12-13, 23. There is an excellent description of how the sculptor planned and executed "The Living Hall of Washington 1944", and "Lincoln at Gettysburg". The information is in professional language. There are seven excellent photographs.
29. "Ernest Watson and His Sculpture for the Philadelphia Post Office". American Artist, 4 (December, 1940), pp. 4-8. There are sixteen excellent photographs of clay panels. There is an excellent photograph of a cast of a panel. The professional information explains how an artist plans such a project.

11. Whaslock. Additional References

1. Beriau, O. A. "Peasant Potters of Beauce". Craft Horizons, 3 (May, 1944), pp. 14-15.
Pictures of pottery. The article describes how Quebec and Beauce, in particular, are helping to develop crafts.
2. Bryan, Jessie F. "Bifocal Business". Craft Horizons, 3 (May, 1944), pp. 9-11.
Three small photographs. A brief account of how a woman developed a business in pin making.
3. Campbell, Dora H. "The Winnipeg School of Art". School Arts, 43 (April, 1944), p. 271.
Two excellent photographs. One is of low relief; the other is of full round sculpture.
4. _____. "There's Beauty in the Commonplace". School Arts, 43 (April, 1944), pp. 264-265.
Three excellent photographs of carved roots. The text is good.
5. Cheney, Warren. "Emotional Expression in Sculpture". Art Instruction, 3 (March, 1939), pp. 17-20.
Photographs of high relief and full round sculpture. The text is an excellent description of the statues.
6. Hanks, Grace. "The Skull as a Factor in Caricature". Art Instruction, 2 (April, 1938), p. 11.
Excellent photographs of the skull.
7. Olmsted, Anna Wetherill. "Are Ceramics Art?" Craft Horizons, (May, 1944), pp. 6-8.
Three large photographs of pottery. The text is excellent, but it is mostly about exhibitions.
8. Price, Matlack. "O Stands for Oberhardt". Art Instruction, 3 (February, 1939), p. 13.
An excellent photograph of a high relief.
9. Randall, "Ceramists Page". Craft Horizons, 4 (February, 1945), p. 15.
A large photograph of excellent pottery.
10. Sauerbrei, Claude. "Sanchi, Beautiful And Eternal". Asia, 42 (February, 1942), pp. 100-102.
Excellent photographs of relief carving.

Additional References

1. Berlan, O. A. "Peasant Pottery of Beauce". Graft Horizons, 3 (May, 1944), pp. 14-15.
The article describes how
Quebec and Beauce, in particular, are helping to
develop crafts.
2. Bryan, Jessie F. "Bifacial Business". Graft Horizons,
3 (May, 1944), pp. 9-11.
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3. Campbell, Dora H. "The Winnipeg School of Art".
School Arts, 45 (April, 1944), p. 271.
Two excellent photographs. One is of low relief;
the other is of full round sculpture.
4. "There's Beauty in the commonplace".
School Arts, 45 (April, 1944), pp. 254-255.
Three excellent photographs of carved rosettes. The
text is good.
5. Cheney, Warren. "Emotional Expression in Sculpture".
Art Instruction, 3 (March, 1939), pp. 17-20.
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ary, 1945), p. 15.
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10. Bauerbreit, Claude. "Sancé, Beautiful and Eternal".
Asia, 42 (February, 1942), pp. 100-102.
Excellent photographs of relief carving.

11. Wheelock, Warren. "William Zorach". Art Instruction, 3 (April, 1939), pp. 18-21.
 Model Four excellent photographs of stone sculpture. The text is a clear description of the artist's life, ideals, and work.

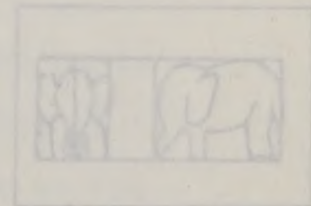
- Materials.-- Arithmetic paper, 6 by 8 inches; newspaper
 12. "The Wood Sculpture of John Rood".
American Artist, 6 (June, 1945), pp. 11-13.
 Four excellent photographs of wood carving. The article gives an account of the artist's life. It also tells how he plans his work.

13. "Sculpture by Gertrude K. Lathrop".
American Artist, 6 (October, 1942), pp. 16-17.
 Excellent photographs and text.

- Procedure.-- Roll small amounts of the clay between the
 14. "Designs for Throwing". Craft Horizons, 4 (February, 1945), p. 14.
 Two photographs of pottery. The article is excellent. Some of the words are a little technical for junior high students.

Draw the front and side views of the animal on the arithmetic paper.

Shape a lump of clay for the main part of the body.



Roll a ball of clay about one-fourth of this size and add it to the body for a neck.

Rub the joining edges until they are gone.

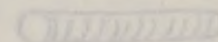
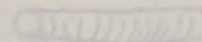


Add a similar ball of clay to the neck for the head.



Rub the joining edges until they are gone.

Make two rolls of clay about as long as the body, and one-third as thick.



Break each roll in halves and add the four legs to

11. Wheelock, Warren. "William Zorach". Art Instruction, 3 (April, 1939), pp. 18-21. Four excellent photographs of stone sculpture. The text is a clear description of the artist's life, ideals, and work.
12. "The Wood Sculpture of John Hood". American Artist, 6 (June, 1942), pp. 11-13. Four excellent photographs of wood carving. The article gives an account of the artist's life. It also tells how he plans his work.
13. "Sculpture by Gertrude K. Lathrop". American Artist, 6 (October, 1942), pp. 18-19. Excellent photographs and text.
14. "Designs for Throwing". Craft Horizons, 4 (February, 1942), p. 14. Two photographs of pottery. The article is excellent. Some of the words are a little technical for junior high students.

Special Study Guides

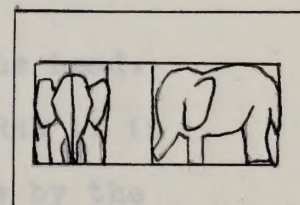
Model A Small Toy or Animal (an elephant, for example.)

Materials.-- Arithmetic paper, 6 by 9 inches; newspaper to cover desk; one pound of plasteline or clay; a 6 by 6 by 1 inch piece of varnished wood or waxed paper 6 by 6 inches (on which to set animal); waxed paper in which to wrap unused clay between lessons.

Procedure.-- Roll small amounts of the clay between the hands until the clay is reasonably soft. Practice shaping the clay between the fingers.

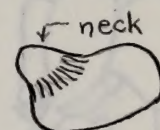
Draw the front and side views of the animal on the arithmetic paper.

Shape a lump of clay for the main part of the body.

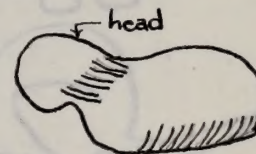


Roll a ball of clay about one-fourth of this size and add it to the body for a neck.

Rub the joining edges until they are gone.

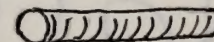
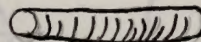


Add a similar ball of clay to the neck for the head.



Rub the joining edges until they are gone.

Make two rolls of clay about as long as the body, and one-third as thick.



Break each roll in halves and add the four legs to

Special Study Guides

Model A Small Toy or Animal (an elephant, for example.)

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to cover desk; one pound of plasteline or clay; a

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paper 6 by 6 inches (on which to set animal); waxed

paper in which to wrap unused clay between lessons.

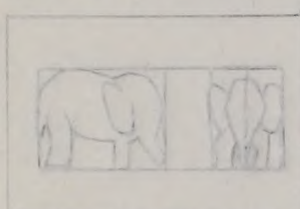
Procedure.-- Roll small amounts of the clay between the

hands until the clay is reasonably soft. Practice

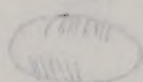
shaping the clay between the fingers.

Draw the front and side views of the animal on the

arithmetic paper.



Shape a lump of clay for the



main part of the body.

Roll a ball of clay about one-fourth of this size



and add it to the body for a neck.

Rub the joining edges until they

are gone.

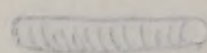
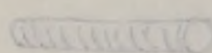


Add a similar ball of clay to the

neck for the head.

Rub the joining edges until they are gone.


Make two rolls of clay about as long as the body, and



one-third as thick.

Break each roll in halves and add the four legs to

the body. Press each pair partly under the body.

Rub the upper and under joining edges until they are gone. 

Shape the head by pressing sides with the fingers.

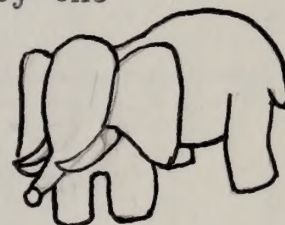
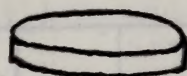
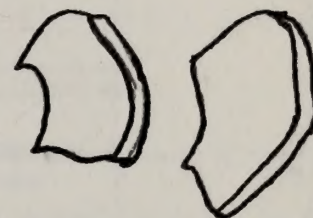
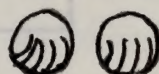
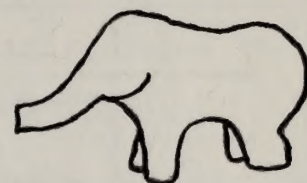
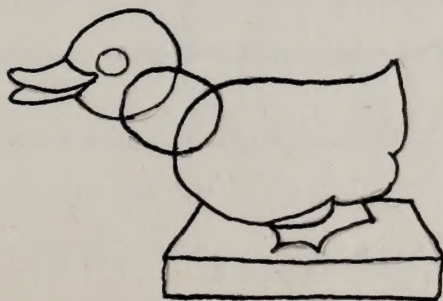
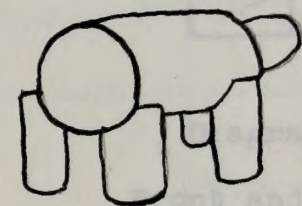
Pull trunk from the front of the head by gently rolling out front end of head.

Roll two small balls of clay.

Flatten them between thumb and finger and shape like ears.

Blend front edge to the side of the head.

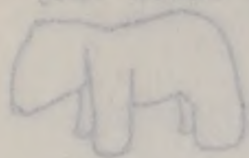
Roll a long thin strip of clay. Rub it in to the body for a tail. Add tusks by the same process.



* These are one-half actual size.

the body. Press each pair partly under the body.

Rub the upper and under joining edges until they



are gone.

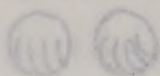
Shape the head by pressing sides

with the fingers.



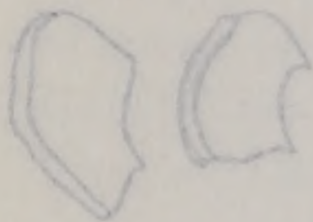
Pull trunk from the front of the

head by gently rolling out front

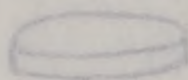


end of head.

Roll two small balls of clay.



Flatten them between thumb and



finger and shape

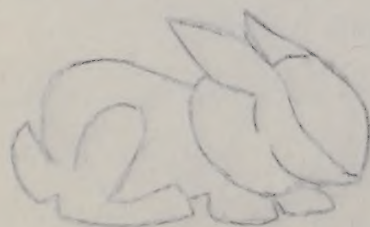
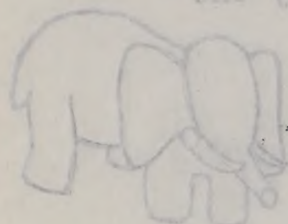
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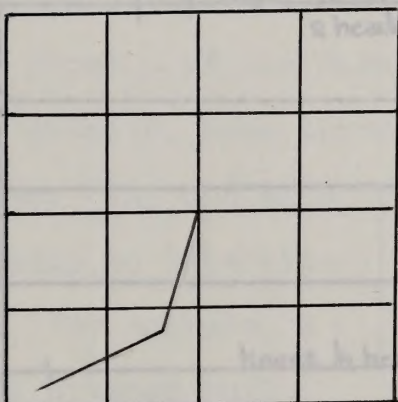
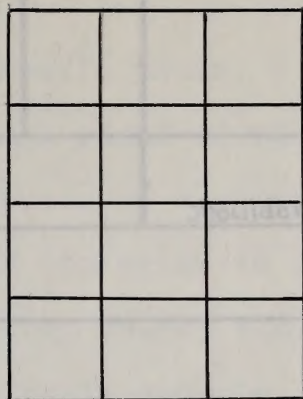
Blend front edge to the side of the head.

Roll a long thin strip of clay. Rub it in

to the body for a tail. Add tufts by the

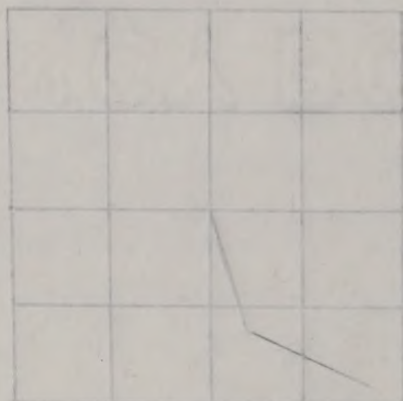
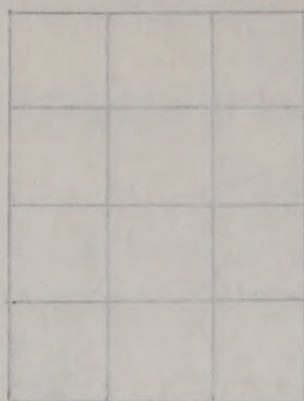
same process.





Diagrams for Drawing *
Front and Side View of Head

* These are one-half actual size.



Diagrams for Drawing *
Front and Side View of Head

* These are one-half actual size.

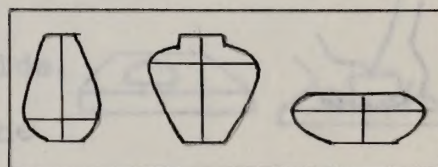
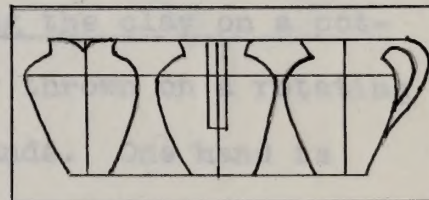
0				Model dishes				$7\frac{1}{2}$
								7
1				Shoulders, 2 heads				6
2								5
				waist, 1 head				4
3				hips, $1\frac{1}{2}$ heads, man 2 heads, woman				3
4								2
5								1
6								0
7				ankle				
$7\frac{1}{2}$								

Diagram for Drawing
Front and Side Views of Figure


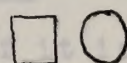
Model Dishes

Materials.-- Arithmetic paper, 6 by 9 inches; newspaper to cover desk; one pound of plasteline or clay; a 6 by 6 by 1 inch piece of varnished wood or waxed paper 6 by 6 inches (on which to set dishes); waxed paper in which to wrap unused clay between lessons.

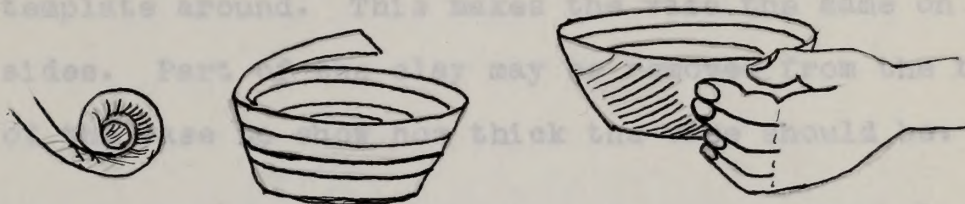
Procedure.-- Roll small amounts of the clay between the hands until it is reasonably soft. Practice shaping the clay between the fingers. Draw a pattern of one side of the vase or dish on the arithmetic paper. If the dish has more sides, draw them. For example, draw three views of a pitcher. The use of a dish will help to determine its shape. For example, a teapot or a pitcher must have a spout. The widest part of a dish is usually above or below the center.



The amount of width used for the amount of height is what makes a dish beautiful or ordinary.

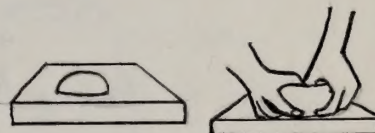
Since an oblong and an oval  are more interesting than a circle and a square ; the greatest height and the greatest width of a vase are rarely the same.

Dishes may be made by the coil method.--- Roll clay into a small roll. The size of the dish will determine the thickness of the roll. One-eighth of an inch would be right for small dishes. They are about three inches wide and one inch tall.



Wind coil, pressing the roll to itself each time. Study the shape from all sides to make sure that it looks the same. Smooth the coils all together, when the dish is finished.

Dishes may be made by spinning the clay on a potter's wheel.--- A lump of clay thrown on a rotating board may be shaped by the hands. One hand is placed inside of the lump, and one hand shapes the outside.

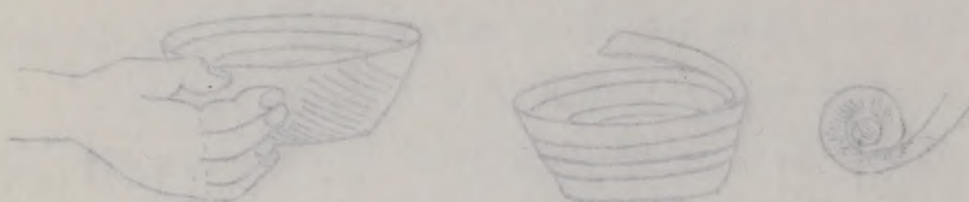


The spinning helps to make the vase just the same on all sides. A small vase may be made just by turning it between one's hands.



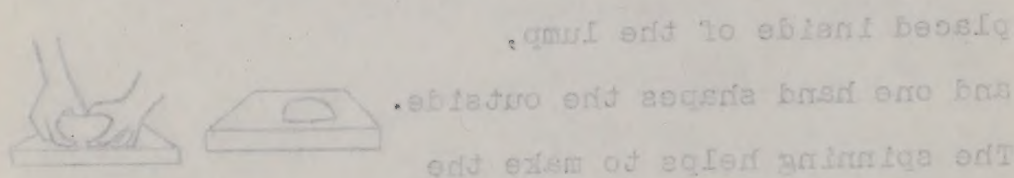
Dishes may be designed as solid shapes.--- A dish or vase may be built up as a figure. If it is tall, it will need a varnished wire armature fastened to the wooden base. Coat hanger wire may be used. This

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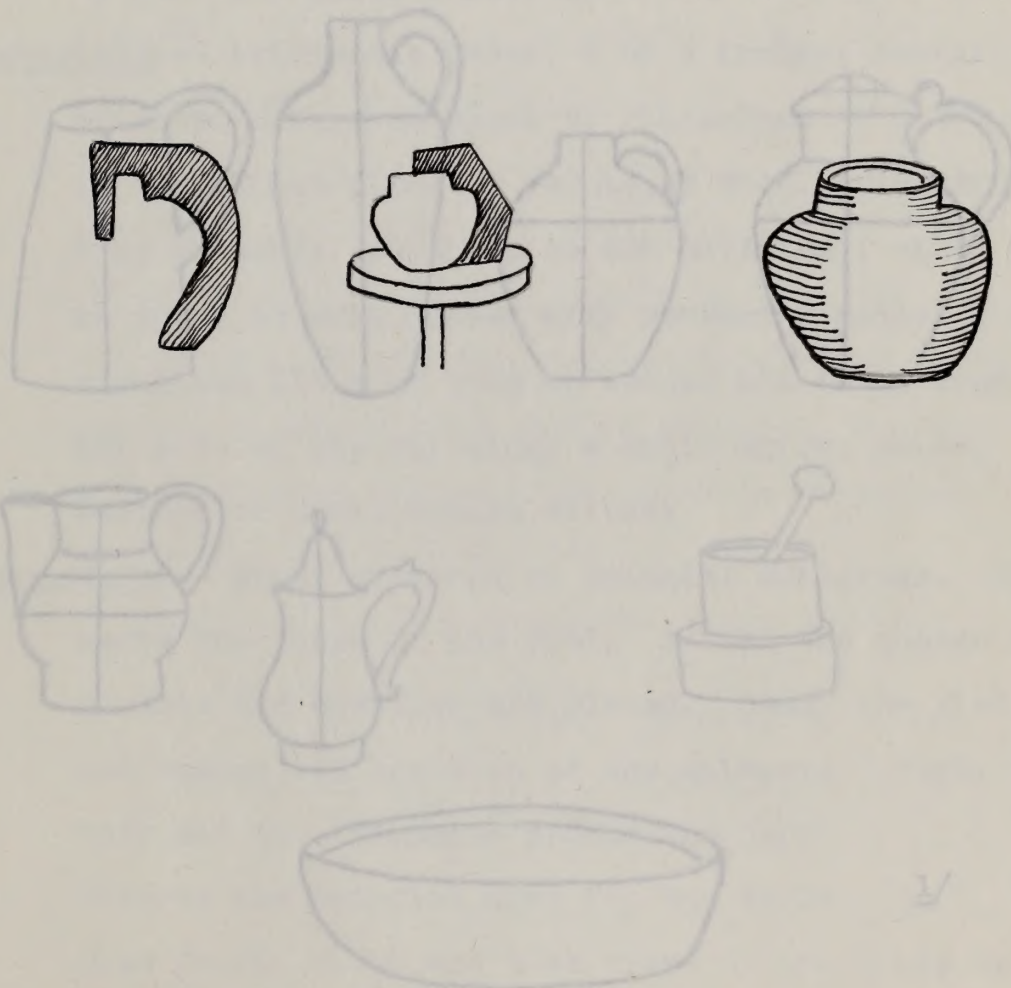


placed inside of the lump, and one hand shapes the outside. The spinning helps to make the vase just the same on all sides. A small vase may be made just by turning it between one's hands.

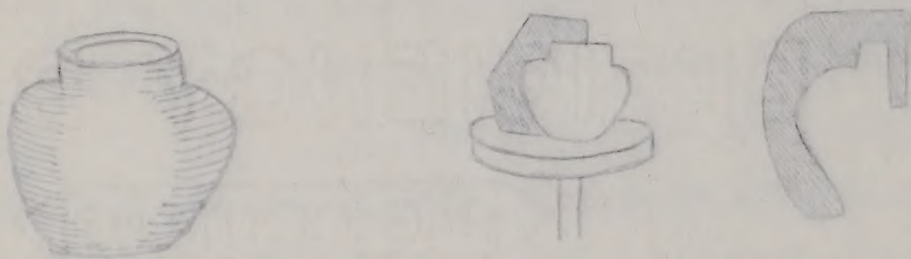


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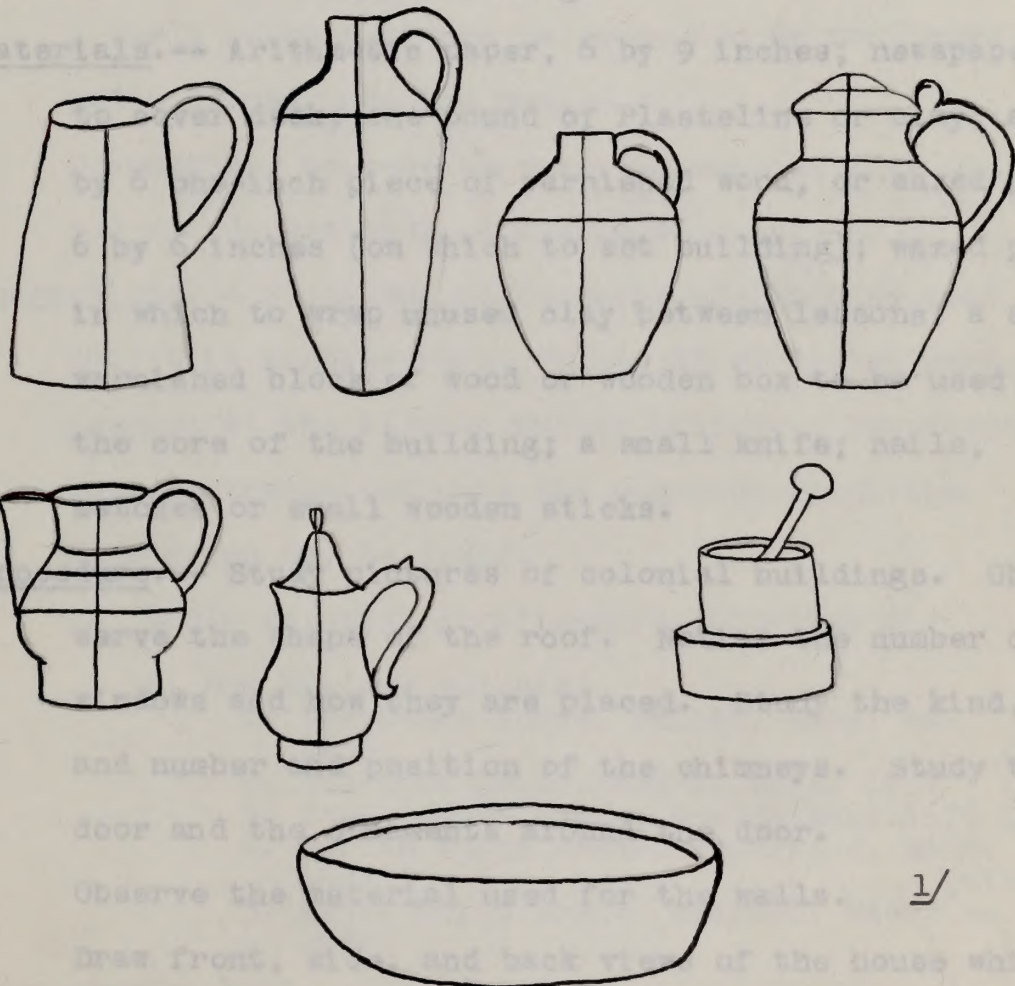
last method is the most practical one for making medium sized vases that keep their shape. A potter sometimes makes a template which is one-half of the shape of the vase in zinc. He then places the pivot down through the center of the vase and turns the template around. This makes the vase the same on all sides. Part of the clay may be removed from the top of the vase to show how thick the vase should be.



last method is the most practical one for making medium sized vases that keep their shape. A potter sometimes makes a template which is one-half of the shape of the vase in mind. He then places the pivot down through the center of the vase and turns the template around. This makes the vase the same on all sides. Part of the clay may be removed from the top of the vase to show how thick the vase should be.



Suggestions.-- Vases, sugar bowls, tea pots, pitchers, candlesticks, salt shakes, tea kettles, and candy dishes. Find pictures of these articles made in colonial times. Try to make your "dish" colonial, but not exactly like one that you see.



1/ Samuel Chamberlain, Historic Salem In Four Seasons, p. 16. New York: Hastings House, Publishers, 1938.

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1. Samuel Chamberlain, Historic Salem in Four Seasons,
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Model An Animal

Model Head

Modeling Figure

Bas-relief (Tile)

Explanation.--- These are duplicates of those used in the first and second unit. They were used but they are not repeated here.

Model Buildings

Materials.--- Arithmetic paper, 6 by 9 inches; newspaper to cover desk; one pound of Plasteline or clay; a 6 by 6 one-inch piece of varnished wood, or waxed paper 6 by 6 inches (on which to set building); waxed paper in which to wrap unused clay between lessons; a small varnished block of wood or wooden box to be used as the core of the building; a small knife; nails, matches or small wooden sticks.

Procedure.--- Study pictures of colonial buildings. Observe the shape of the roof. Notice the number of windows and how they are placed. Study the kind, and number and position of the chimneys. Study the door and the ornaments around the door. Observe the material used for the walls. Draw front, side, and back views of the house which you want to model.

Cover the varnished block or box with an even coat

of clay.

Build up the roof and add the chimneys.

Draw the spaces for the windows and the doors with a small wooden stick.

Cut small flat strip of clay and add window and door frames.

Add pilasters (flat imitation columns against a building) in the same way.

A small porch roof may be supported by two large nails driven into the box.

Columns may be made by covering matches with clay.

Add all decorations as strips of clay.

Suggestions.-- Study the photographs in The American Spirit in Architecture, Volume 13 of The Pageant of America at the Aldrich Public Library. The numbers in parentheses indicate the pages on which the photograph may be found.

I. Early Colonial Architecture 1620-1720 1/

A. New England Colonial

1. Fairbanks House, Dedham, Mass. ca. 1636 (38)
2. Boardman House, Saugris, Mass. 1651 (45)
3. Paul Revere House, Boston, Mass. 1676 (47)
4. Parson Capen House, Topsfield, Mass. 1683 (41-43)
5. Peter Tuffs House, Medford, Mass. ca. 1680 (53)

From New England Colonial

1/ Hugh S. Morrison, American Architecture, mimeographed list of illustrations given with a course by the same name. Harvard University Summer School, 1936.

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✓ Hugh S. Morrison, American Architecture, photographed
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6. John Ward House, Salem, Mass. 1684 (49)

B. Dutch Colonial (New York, Long Island, Northern New Jersey)

1. Houses in Old Hurley, N.Y. 17th century (61,63)
2. Ditmars House, Flatbush, N.Y. 18th century (130)
3. Dychman House, Broadway, 1798 (223)

C. Pennsylvania Colonial ("Middle" or "German" Colonial).

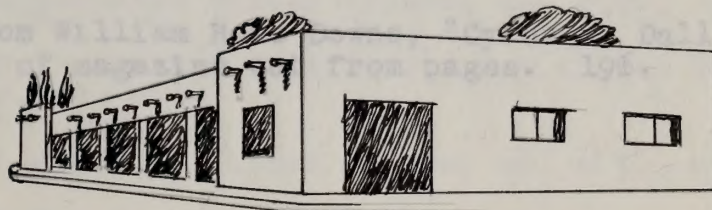
1. Wyck House, Philadelphia, 1690 (69)

D. Southern Colonial (Virginia and the Carolinas)

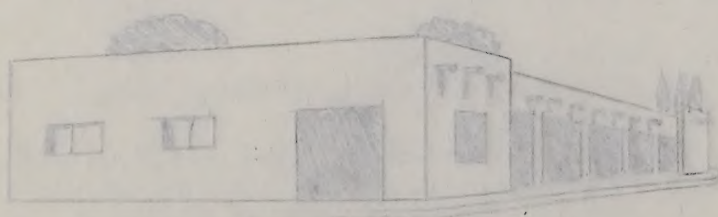
1. Adam Thoroughgood House, Yorktown, Va. 1640-50 (82)
2. Bacon's Castle, Surrey County, Va. ca. 1654 (74-75)

E. Spanish Colonial (Florida and the Southwest)

1. The Alamo, San Antonio, Texas ca. 1720 (32)
2. Cathedral, St. Augustine, Fla. 18th century (21)
3. Santa Barbara Mission, Calif. 1787-1800 (33)
4. San Luis Rey de Fransia Mission, Calif. 1802 (36)
5. Governor's Palace, Santa Fe, New Mexico 1609



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Cyrus E. Dallin

The life of Cyrus E. Dallin.--- /Cyrus E. Dallin was

born on November 22, 1861 in Springville, Utah, to Thomas and Jane (Hamer) Dallin who had come there from England.]

1/ [He was the eldest of a family of eight children.]2/

[Dallin's early home was a one-story log cabin which was suited to the beautiful but awe-inspiring mountainous country. An adobe wall, ten feet high, protected Springville from plundering Indians.]3/

[As a boy, Dallin herded cows....shot duck....picked berries....and explored the mountains.]4/ When he was fourteen "he and a comrade.... [drove] a wagon, loaded with produce three times a week....through a canyon, clear up to the snow line where the woodcutters slept in the open."5/

[When Dallin was eighteen years old, he worked in his father's mines. There he discovered] clay with which

1/ Adapted from Beatrice Gilman Proske, Brookgreen Gardens Sculpture, p. 26. Brookgreen, S.C.: Printed by Order of the Trustees, 1943.

2/ Adapted from William Howe Downs, "Cyrus E. Dallin." Name and date of magazine cut from pages. 196.

3/ Loc. cit.

4/ Loc. cit.

5/ Ibid., p. 197. Britannica, A New Survey of Universal Knowledge, Fourteenth Edition, Vol. 6, Colerbrook to Lamas-sius, p. 991. New York: The Encyclopaedia Britannica Company, Inc., 1929.

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4/ loc. cit.

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[Dallin was nineteen years old the year he came to Boston. He found work in a terra-cotta factory. He studied art in evening school with Truman H. Bartlett.]^{2/}

[Two years later he opened his own studio where he made portrait busts and statuettes. He made his first Indian statuette at this time.]^{3/}

[In 1882 Dallin placed a statue of Paul Revere in an open competition held by the City of Boston Art Commission He won the first prize.]^{4/}

[Dallin studied in Paris at two famous art schools, the École des Beaux Arts, and the Académie Julien.]^{5/}

[He made small statuettes of Indians who were in Buffalo Bill's Wild West Show when it came to Paris.]^{6/}

[After his return to America he became a modeling teacher in the State Normal Art School in Boston where he taught until 1942.]^{6/}

^{1/} Adapted from Beatrice Gilman Proske, loc. cit.

^{2/} Adapted from The Boston Herald-Traveler or The Boston Globe, Nov. 14, 1944.

^{3/} Adapted from Beatrice Gilman Proske, op. cit., pp.25-26.

^{4/} Adapted from The Boston Herald-Traveler or The Boston Globe, November, op. cit.

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^{6/} Adapted from The Encyclopaedia Britannica Company, Inc., The Encyclopaedia Britannica, A New Survey of Universal Knowledge, Fourteenth Edition, Vol. 6, Colebrook to Damascus, p.991. New York: The Encyclopaedia Britannica Company, Inc., 1929.

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Finally in 1940, the heroic-size statue of Paul Revere was erected on the Paul Revere Mall in the North End, Boston, Massachusetts.^{2/}

"During the last part of his life, Mr. Dallin workedat his studio in Arlington Heights..... At the time of his death he was modeling a statue of a knight on horseback.... called The Challenge."^{3/}

He died on November 13, 1944 at his home in Arlington Heights, Massachusetts.^{4/}

The sculpture of Cyrus E. Dallin.-- The Signal of Peace, Lincoln Park, Chicago, 1890. The model for this equestrian memorial was made in Buffalo Bill's camp in Paris.^{5/}

The Medicine Man, Fairmount Park, Philadelphia. The doctor, chief man of wisdom, and religious spokesman speaks

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loc. cit.

loc. cit.

Adapted from Beatrice Gilman Proske, loc. cit.

with earnestness for his people.

The Protest.

The Appeal to the Great Spirit, in front of the Museum of Fine Arts, Boston, Massachusetts, 1909. The figure is praying with every fiber of his being to the Spirit who is an all-powerful part of his world.

The Scout, Penn Valley Park, Kansas City, Missouri.

Massasoit, Cole's Hill, Plymouth, Massachusetts, 1921.

The Cavalryman, Hanover, Pennsylvania, 1905.

Alma Mata, Mary Institute, Saint Louis, Missouri, 1916.

Anne Hutchinson, in front of the left wing of the Boston State House, Boston, Massachusetts, 1922. [Anne Hutchinson is Boston's only monument to a woman. She is dressed in Puritan costume and a little girl stands by her side.

The bronze statue cost \$15,000. Several janitors erected it in a storm, without a dedication on July 5, 1922.]^{1/}

A Memorial to the Pioneer Women of Utah, Salt Lake City, Utah, 1931. [Dallin's Mother was the model for this statue which was erected at his birthplace.]^{2/}

Paul Revere, Boston, Massachusetts, 1940. [Mr. Dallin considered this his best work. The first model won the first prize in two competitions held by the City of Boston Art Commission. A large part of the money for it was to be

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Paul Revere, Boston, Massachusetts, 1940. ^{3/} Mr. Dallin considered this his best work. The first model won the first prize in two competitions held by the City of Boston Art Commission. A large part of the money for it was to be ^{4/} Adapted from Jack Frost, Fancy This, p. 6. Boston, Mass.: Anchor Linotype Printing Co., 1937.
^{5/} Adapted from Beatrice Gilman Proke, loc. cit.

raised by volunteer public subscription. A newspaper article stating the adverse criticism of a prominent figure in the art world did much to dampen public interest. Mr. Dallin's persistent efforts resulted in the purchase of the statue by the City of Boston for \$27,500. The cost of the bronze alone was expected to exceed \$10,000. The cost of the bronze and casting was borne by Mr. Dallin. The statue weighs four tons and it is twenty-one feet from the ground to the top of Paul Revere's hat. The pedestal of granite was designed by J. Lovell Little and Raymond Porter.^{1/}

^{2/} he ran away because he was forced to paint cherubs instead of Indians.^{2/}

^{3/} He studied art with members of an art association in San Francisco, California in 1880.^{4/} "During 1890-93 he attended the Academie Julian and the École des Beaux Arts in Paris."^{5/} ^{6/} He also visited Spain and painted there.^{6/}

^{1/} Adapted from J. Walker McQuadden, Famous Sculptors of America, p. 215. New York: Dodd Mead and Company, 1924.

^{2/} Loc. cit.

^{3/} Ibid., p. 216.

^{4/} Ibid., p. 217.

^{5/} Adapted from The Encyclopaedia Britannica Company, Inc., The Encyclopaedia Britannica. A New Survey of Universal Knowledge, Fourteenth Edition, Vol. 3, Baltimore to Braila, p. 993. New York: The Encyclopaedia Britannica Company, Inc., 1929.

^{6/} Adapted from J. Walker McQuadden, op. cit., p. 219.

^{1/} Adapted from The Boston Herald-Traveler, January 5, 1940, (?) Vol. 188, No. 6.

Gutzon Borglum

The life of Gutzon Borglum.--- [Gutzon Borglum's father, Dr. James de la Mothe Borglum was one of our Danish pioneers. He was a wood carver in his youth, but he later became a doctor.]^{1/}

[Gutzon was born in Idaho, March 25, 1867. He both painted and carved. He had a brother, Solon, who was also a sculptor, and a painter. When Gutzon left home to work and study, he omitted the de la Mothe from his name.]^{2/}

[His family sent him to Saint Mary's College in Kansas, but he ran away because he was forced to paint cherubs instead of Indians.]^{3/}

[He studied art with members of an art association in San Francisco, California in 1880.]^{4/} "During 1890-93 he attended the Academie Julien and the École des Beaux Arts in Paris."^{5/} [He also visited Spain and painted there.]^{6/}

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3/ Ibid., p. 216.

4/ Ibid., p. 217.

5/ Adapted from The Encyclopaedia Britannica Company, Inc., The Encyclopaedia Britannica. A New Survey of Universal Knowledge, Fourteenth Edition, Vol. 3, Baltimore to Bralia, p. 990. New York: The Encyclopaedia Britannica Company, Inc., 1929.

6/ Adapted from J. Walker McSpadden, op. cit., p. 219.

When he was 25 years old he returned to California and spent a year with his brother, painting and carving in the Sierra Nevada Mountains.^{1/}

He visited London, exhibited his paintings, and received the approval of Queen Victoria.^{2/}

Gutzon opened a studio in New York in 1902. Here he painted a mural for a music hall in London.^{3/}

The huge proportions of much of his work can be compared only with that of antique oriental monuments.^{4/}

Gutzon Borglum studied and enjoyed the sculpture of Rodin.^{5/}

"Mr. Borglum is a man of strong beliefs^{6/} He feels that a monument has no business to have anything upon it, not a stone or a mark that does not directly apply to the reasons for memorializing it."^{7/} He is convinced that "the reason for building a work of art, can only be for the purpose of fixing in some durable form a great

^{1/} Adapted from J. Walker McSpadden, op. cit., p. 219

^{2/} Ibid., p. 220.

^{3/} Loc. cit.

^{4/} Ibid., p. 223.

^{5/} Adapted from The Encyclopaedia Britannica Company, Inc., op. cit., p. 991.

^{6/} Ibid., p. 990.

^{7/} Adapted from J. Walker McSpadden, op. cit., p. 243.

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Ibid., p. 220.

Ibid., p. 221.

Ibid., p. 222.

Adapted from The Encyclopedia Britannica Company, Inc., op. cit., p. 221.

Ibid., p. 222.

Adapted from J. Walker McSpadden, op. cit., p. 223.

emotion, or an idea, of the individual or of the people."^{1/}

[Gutzon Borglum lives on an estate in Stamford, Connecticut. He is active in local and national affairs. He has worked for good roads and motor busses for his country. He has designed the motor busses.]^{2/} [He believes that] "the man of position or wealth, who remains passive in the public life going on about him, is in the same class with the man who [pretends that he is asleep when a burglar is in the room.]"^{3/}

Sculpture by Gutzon Borglum.--- The Mares of Diomedes, in the Metropolitan Museum, New York. "That title....was found long after the group was made." [It shows a horseman stealing horses.] "I stripped the horseman of garments both to [free him] from local relations ^{4/}and also to show the play of a fine nude figure on a nude horse. The name is a conveniencethe motive of the group, mainly intense controlled action."^{5/}

The heroic groups of the twelve Apostles and the sculptured angels for the Cathedral of Saint John the

^{1/} Adapted from J. Walker McSpadden, op. cit., p. 229.

^{2/} Ibid., pp. 243-4.

^{3/} Ibid., p. 242.

^{4/} Adapted from James C. Fernald and Frank H. Viseltelly, The Desk Standard Dictionary, of the English Language, p. 223. New York: Funk & Wagnalls Company, 1937.

^{5/} Adapted from J. Walker McSpadden, op. cit., p. 222.

Devine in New York. "They are strong and original.

[/The angels aroused discussion as to whether or not an artist had the right to make them men or women.]^{1/}

The Princeton gargoyles, Princeton University.

"[/They_] are masterpieces of ugliness. [/Borglum_] discovered that the gargoyle was an ignorant superstitious artizen [/or mechanic_] who imagined the projections of the building to be the spirits he feared, and who fashioned [/made_] them accordingly. The North Wind, Snout, Bottom, and Half-equipped [/are the names of some of the Princeton gargoyles.]^{2/}

General Sheridan, Washington, D. C. "[/Young Captain Philip Sheridan, son of the general, rode one of Borglum's Arabian horses, while the sculptor studied them.]^{3/}

Lincoln, Court House Grounds, Newark, New Jersey.

"My seated Lincoln represents Lincoln in his garden as he would sit and think and look were he really alone. The placing of the figure at the end of the bench-- the whole arrangement of the figure is to get away from [/the_] false and artificial attitudes of the commercial monument. [/The fact that_] it is placed practically on a

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^{2/} Ibid., p. 224.

^{3/} Loc. cit.

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✓ Ibid., p. 224.

✓ loc. cit.

level with the eye" [is unusual.]^{1/}

A colossal head of Lincoln in the Rotunda of the Capitol at Washington, D. C. [This is a portrait made from [the] observation of many splendid pictures and the life mask by Volk. It was originally intended simply as a study.]^{2/} [Previous to this, in 1919, he exhibited another huge head of Lincoln cut from a block weighing six tons.]^{3/} "Mr. Borglum made a close study of Lincoln portraits and Lincoln's writings in preparation for his work on the heads and the statue of Lincoln. Today he is probably one of our foremost authorities on Lincoln."^{4/}

The Memorial to the Southern Confederacy, on Stone Mountain, near Atlanta, Georgia. [This monument was designed to represent the Confederate Army on the march. The site was dedicated in May, 1916. According to McSpadden, Borglum did considerable work on it.]^{5/} [However, on August 27, 1925, a new design by Augustus Lukeman was adopted.]^{6/}

^{1/} Adapted from J. Walker McSpadden, op. cit., p. 223.

^{2/} Ibid., p. 234. The Encyclopaedia Britannica Company, Inc.

^{3/} Adapted from The Encyclopaedia Britannica Company, Inc. loc. cit.

^{4/} Ibid.

^{5/} Adapted from J. Walker McSpadden, op. cit., p. 235.

^{6/} Adapted from The Encyclopaedia Britannica Company, Inc., loc. cit.

"A monument for Warsaw, commemorating the rebirth of Poland."^{1/}

"A statue of Henry Ward Beecher at Brooklyn, New York."^{2/}

"Alexander Stephens for the Georgia section of the National Hall of Fame."^{3/}

"The Memorial to the Presidents, Mt. Rushmore, Black Hills of South Dakota. [These are] gigantic figures of President Washington, Jefferson, Lincoln, and Roosevelt. The memorial was dedicated by President Coolidge on August 10, 1927."^{4/}

[Evenings he studied in the schools of the Cooper Union (1861) and the National Academy of Design (1865-1866).]

[He made a bronze bust of his father, just before he]

^{1/} Adapted from Beatrix Gilman Froese, *Brookgreen Garden Sculpture*, p. 9. Brookgreen, S. C.: Printed by Order of the Trustees, 1943.

^{2/} Adapted from The Encyclopaedia Britannica Company, Inc., *The Encyclopaedia Britannica, A New Survey of Universal Knowledge*, Fourteenth Edition, Vol. 19, Maynal to Sarrazin, p. 830. New York: The Encyclopaedia Britannica Company, Inc., 1930.

^{3/} Adapted from Beatrix Gilman Froese, loc. cit.

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 Loc. cit.
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Augustus Saint-Gaudens

The life of Augustus Saint-Gaudens.--- "[Augustus

Saint-Gaudens was born in Dublin, Ireland on March 1, 1848.

1/ His French father, Bernard Paul Ernest Saint-Gaudens was a shoemaker by trade. His mother, Mary McGuinness] was Irish."2/

"His parents brought him to New York soon after he was born. There he spent his childhood."

"]When he grew up, he became an apprentice to a stone cameo cutter, because he wished to be an artist.]" "This craft supported him during his student days and the lean years of struggle."3/

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3/ Adapted from Beatrice Gilman Proske, loc. cit.

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went to Paris in 1868. ^{1/}

[He studied with Jouffrey in the École des Beaux Arts. Later with a fellow student he went to Italy where he stayed for three years. ^{2/}

[When he returned to New York in 1875 he established a studio and worked with the painter, John LaFarge, and the architect, Stanford White. ^{3/}

[Saint-Gaudens went to Paris again and made the Sherman Monument which won him a grand prize at the Paris Exposition of 1900. He was also elected an officer of the Legion. ^{4/}

[After the exhibition of the unusual statue of Admiral Farragut he was recognized as a leader in his art. ^{5/}

[He made many portraits of his friends in low relief. He enjoyed the change from the work on his large statues. ^{6/}

[He was the father of American sculpture. His influence started a national school. He started the artistic designing of coinage and medals in this country. ^{7/}

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^{3/} Adapted from Beatrice Gilman Proske, op. cit., p. 9.

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^{5/} Adapted from The Encyclopaedia Britannica Company, Inc., op. cit., p. 831.

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[The sculpture of Saint-Gaudens has more life and movement than that made before his time. He aimed to show character, and he made it seem more real by the natural pose of his figures.]^{1/}

[He spent the last years of his life working in his studio in Cornish, New Hampshire. Unlike many artists he was showered with honors before he died on August 3, 1907.]^{2/}

Sculpture by Augustus Saint-Gaudens.--- Admiral Farragut, Madison Square, New York, 1881. [A full sculptured figure is placed above an exedra (like a wall) decorated in low relief.]^{3/}

The Puritan, Springfield, Massachusetts, 1887. [A monument to Deacon Samuel Chapin, one of the founders of Springfield. A stern looking man steps forward. He holds a Bible under his left arm, and he strikes the ground with the cane-like stick in his right hand. He wears puritan clothes. A huge cape sweeps back from his shoulders. The pine branch at his feet suggests New England woods.]^{4/}

The Pilgrim, Philadelphia, Pennsylvania, 1905. [This statue is similar to the Puritan, but some changes were made. The face is longer, and the folds of the cape, the

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- 2/ Ibid., p. 10.
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legs, the left hand, and the Bible are altered. ^{1/}

Hiawatha. ^{2/}

Silence. ^{3/}

A bust of William M. Evarts, New York. ^{4/}

A relief of adoring angels for St. Thomas' Episcopal Church, New York. ^{5/} [His brother felt that this was excellent. ^{5/}

Lincoln, Lincoln Park, Chicago, Illinois, 1887. [This statue of Lincoln standing in front of a chair is often considered his masterpiece. ^{6/}

The Adams Memorial, Rock Creek Cemetery, Washington, D. C., 1891. [The statue is called] "The Peace of God."

[The seated figure of a woman is wrapped in a long cloak. ^{7/} She seems at peace with herself and with the world.

The Shaw Memorial, Boston Common, Boston, Massachusetts, 1897. "The large relief in bronze measures some 15 by 11 feet and contains many marching soldiers led by

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^{2/} Adapted from The Encyclopaedia Britannica Company, Inc., loc. cit.

^{3/} Loc. cit.

^{4/} Loc. cit.

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14/ Adapted from The Encyclopedia Britannica Company, Inc.,
15/ loc. cit.

16/ loc. cit.

17/ loc. cit.

18/ loc. cit.

19/ Adapted from Beatrice Gilman Proake, op. cit., p. 9.

20/ loc. cit.

their young officer, [Colonel Robert G. Shaw] on horseback."^{1/} [An angelic figure floats above. This was a negro regiment in the Civil War. The sculptor worked on it over a period of twelve years.]^{2/}

The Sherman Monument, Central Park, New York. "[Sherman riding a fast-stepping horse]^{3/} is led by a beautiful winged Victory. It gives the appearance of light movement."

Randall, of the "Sailors' Snug Harbor", Staten Island, New York.^{4/}

The caryatides for the Vanderbilt fireplace, The Metropolitan Museum, New York.^{5/}

The Peter Cooper Memorial, New York.^{6/}

The Parnell, Dublin, Ireland.^{7/}

The Phillips Brooks Monument, Boston, Massachusetts.^{8/}

^{1/} Adapted from Beatrice Gilman Proske, Brookgreen Garden Sculpture, p. 10.

^{2/} Loc cit.

^{3/} Loc. cit.

^{4/} Adapted from The Encyclopaedia Britannica Company, Inc., The Encyclopaedia Britannica, A New Survey of Universal Knowledge, Fourteenth Edition, Vol. 19, Raynal to Sarreguemines, p. 831. New York: The Encyclopaedia Britannica Company, Inc., 1929.

^{5/} Loc. cit.

^{6/} Adapted from The Encyclopaedia Britannica Company, Inc., p. 831.

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2/ Loc. cit.

3/ Loc. cit.

4/ Adapted from The Encyclopedia Britannica Company, Inc.,
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Sargunian, p. 831. New York: The Encyclopedia Bri-
tannica Company, Inc., 1929.

5/ Loc. cit.

6/ Adapted from The Encyclopedia Britannica Company, Inc.,
p. 831.

7/ Loc. cit.

8/ Loc. cit.

The preacher stands with the figure of Christ just in back of him.

Lincoln, Chicago. [This seated figure of Lincoln was recently placed on Chicago's lake front.]^{1/}

Bas-reliefs in the form of medallions and plaques.
Bastien Lepage and Dr. Henry Shiff, 1880.^{2/}

Homer Saint-Gaudens and the Children of Prescott Hall Butter, 1881. [Homer is the son of Augustus. He is now the director of the Carnegie Institute, Pittsburg, Pennsylvania.]^{3/}

Kenyon Cox, 1889.^{4/}

Robert Louis Stevenson.^{5/}

^{1/} Adapted from The Encyclopaedia Britannica Company, Inc., p. 831.

^{2/} Loc. cit.

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Adapted from The Encyclopedia Britannica Company, Inc., p. 871.

2/ Loc. cit.

3/ Loc. cit.

4/ Loc. cit.

5/ Adapted from Beatrice Gilman Proske, loc. cit.

Daniel Chester French

The life of Daniel Chester French.-- "Daniel Chester French was born at Exeter, New Hampshire, on April 20th, 1850 to Henry Flagg and Anne Richardson French."^{1/} [His father was] "a lawyer, who for a time was assistant secretary of the United States Treasury."^{2/}

When he was young [his family moved to Concord, Massachusetts. He became a friend of May Alcott] who encouraged the boy by [loaning him some modeling tools.] [Daniel was also friendly with the poet Ralph Waldo Emerson, and he modeled a bust of him.]^{3/}

[He went into Boston to study the casts of Greek and Roman sculpture in the Boston Athenaeum which is like a library and a museum combined. Daniel studied anatomy with Dr. William Rimmer who was a sculptor as well as a doctor. He studied one month with the sculptor John Quincy A. Ward,]^{4/} and [he studied one year at the Massachusetts

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^{2/} Adapted from The Encyclopaedia Britannica Company, Inc., The Encyclopaedia Britannica, A New Survey of Universal Knowledge, Fourteenth Edition, Vol. 9, Extracation to Gambrinus, p. 755. New York: The Encyclopaedia Britannica Company, Inc., 1929.

^{3/} Adapted from Beatrice Gilman Proske, op. cit., p. 15.

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A. loc. cit.

Institute of Technology.]^{1/}

[When he was 23 years old, he received his commission to model the Minute Man for Concord, Massachusetts.]

[He spent two years in Florence, Italy working with the sculptor Thomas Ball. He also worked two winters in Washington, D. C.]^{2/}

[He first established studios at Concord and Boston; later, after a second trip to Paris in 1888, he moved his studio to New York].... [While he was there he became acquainted with Augustus Saint-Gaudens.]^{3/}

[Daniel Chester French did sculpture for the Chicago World's Fair.]^{4/}

He worked with Edward Clark Potter on three equestrian statues. Potter did the horses.^{5/}

[Although he did many statues, his purpose was always a very serious one.].... "He was a member of the National Arts Commission which was formed by President Theodore Roosevelt. The National Sculpture Society awarded him a

^{1/} Adapted from The Encyclopaedia Britannica Company, Inc., loc. cit.

^{2/} Adapted from Beatrice Gilman Proske, loc. cit.

^{3/} Loc. cit.

^{4/} Loc. cit.

^{5/} Ibid., p. 17.

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[2] Adapted from The Encyclopedia Britannica Company, Inc.,
1911, p. 17.

[2] Adapted from Beatrice Gilman Proske, loc. cit.

[2] loc. cit.

[4] loc. cit.

[2] Ibid., p. 17.

special medal in 1930."^{1/}

The Sculpture of Daniel Chester French.-- The Minute Man, Concord, Massachusetts, 1875. "The statue of the Apollo Belvidere was used as a model for this statue."^{2/}

John Harvard, Harvard University, Cambridge, Massachusetts, 1884. [The statue represents a real man by that name,⁷ but "the father of Roger Sherman Hoar, state senator of 1911 posed for the statue."^{3/} The costume is correct.

The Angel of Death Staying the Hand of the Young Sculptor, Forest Hills Cemetery, Boston, Massachusetts. [This memorial for the tomb of the sculptor Martin Milmore is his best known work.^{4/} It has the first of his many "majestic angels with great soft wings and many folden draperies." The sculptor's figure shows how well French understands the human form. The idea of the statue is very clear.^{5/}

The Statue of the Republic for the Chicago World's Fair. This was "a colossal statue" ^{6/}[which was made to ^{1/}Adapted from Beatrice Gilman Proske, loc. cit., p. 18.

^{2/} Rebecca Holliday, Supervisor of Art, Hingham, Massachusetts.

^{3/} Adapted from Jack Frost, Fancy This, p. 39. Boston, Massachusetts: Anchor Linotype Printing Co., 1937.

^{4/} Adapted from The Encyclopaedia Britannica, loc. cit.

^{5/} Adapted from Beatrice Gilman Proske, op. cit., p. 15.

^{6/} Adapted from The Encyclopaedia Britannica, loc. cit.

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The Sculpture of Daniel Chester French -- The Minute

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¹ Adapted from Beatrice Gilman Proske, loc. cit., p. 18.

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³ Adapted from Jack Frost, Fancy This, p. 59, Boston,

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⁴ Adapted from The Encyclopedia Britannica, loc. cit.

⁵ Adapted from Beatrice Gilman Proske, op. cit., p. 15.

⁶ Adapted from The Encyclopedia Britannica, loc. cit.

look well with the vertical lines of its building. ^{1/}

The equestrian statues of Grant, Washington, and Hooker, 1899-1903. Edward Clark Potter made the horses and French made the figures.

The O'Reilly Memorial, Boston, Massachusetts.

The Hunt Memorial, New York, New York. "In both of these memorials he [developed] a new treatment of the monument in which a portrait bust was placed in an architectural setting decorated with symbolic figures." ^{2/}

"The bronze doors for the Boston Public Library, Boston, Massachusetts, 1904. One figure in flowing robes is modeled in low relief on each of the four bronze doors. The flying looped fold which he used so often to break the long lines of his angel figures is to be seen here." ^{3/}

"The four groups. Europe, America, Asia, and Africa, on the Custom House, New York, 1907." [These are considered to be his best work of sculpture designed to ornament buildings.] Africa is the most impressive. [In it he shows the first of the magnificent nudes which were to become an important part of his work.] ^{4/}

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^{2/} Op. cit., p. 17.

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Adapted from Beatrice Gilman Prosser, loc. cit.

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3/ loc. cit.

4/ loc. cit.

"Lincoln, Lincoln, Nebraska. [Henry Bacon was the architect; Daniel Chester French was the sculptor.] The sculptured figure of Lincoln stands with his hands linked together before him and his head slightly bowed in thought. [Behind him is a "perfectly proportioned stele" [a large, flat tablet] with its beautifully lettered Gettysburg address."^{1/}

"Lincoln, Lincoln Memorial, Washington, D. C., 1920. [Henry Bacon is again the architect; and Daniel Chester French is the sculptor.] "In the middle on his simple throne sits Lincoln, calm, reposeful, noble." [The simple Greek Doric and Ionic forms of architecture seem to be perfect for a statue which shows the strength, the dignity and the humanity of Lincoln.]^{2/} [The two Lincoln statues are the most famous.] "They illustrate his ability to suggest abstract qualities and get sculptural effects without sacrificing individuality."^{3/}

"General Cass, National Hall of Statuary, Washington, D. C."^{4/}

^{1/} Adapted from The Pageant of America, Vol. 13, p. 224.

^{2/} Op. Cit., p. 230.

^{3/} Adapted from Beatrice Gilman Proske, Brookgreen Gardens Sculpture, p. 17. Brookgreen, S. C.: Printed By the order of the Trustees, 1943.

^{4/} Adapted from The Encyclopaedia Britannica Company, Inc., The Encyclopaedia Britannica, A New Survey of Universal Knowledge, Fourteenth Edition, Vol. 9, Extracation to Gambrinus, p. 755. New York: The Encyclopaedia Britannica Company, Inc., 1929.

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"General Case, National Hall of Statuary, Washington, D. C."

Adapted from The Legend of America, Vol. 13, p. 224. 2d ed., p. 250.

Adapted from Beatrice Gilman Proske, Brookgreen Gardens Sculpture, p. 17. Brookgreen, S. C.: Printed by the order of the Trustees, 1943.

Adapted from The Encyclopedia Britannica Company, Inc., The Encyclopedia Britannica, A New Survey of Universal Knowledge, Fourteenth Edition, Vol. 9, Extension to Gamblers, p. 752. New York: The Encyclopedia Britannica Company, Inc., 1929.

"Dr. Gallaudet and his First Deaf Mute Pupil, Washington, D. C."^{1/}

"Rufus Choate, Boston, Massachusetts."^{2/}

"Thomas Starr King, San Francisco, California."^{3/}

"A Memorial to the Architect, Richard M. Hunt, New York."^{4/}

"Mourning Victory, of the Melvin Memorial, Concord, Mass., 1916."^{5/}

"[This is an angel figure whose] form [is] half sunk in the marble block."^{6/}

"The Spirit of Life, The Trask Memorial, Saratoga Springs, New York. [This angel] with lifted arms and wings has more movement and grace, [than some of his other angels]."^{7/}

"In Flanders Fields, a war memorial, Milton, Massachusetts." The sculptor considered this one of his best works. The figure of a young man, his strength failing as he holds

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^{2/} Loc. cit.

^{3/} Loc. cit.

^{4/} Loc. cit.

^{5/} Loc. cit.

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^{7/} Loc. cit.

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- "Rites Observed, Boston, Massachusetts." 2/
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- 6/ Adapted from Beatrice Gilman Proske, loc. cit.
- 7/ Loc. cit.

a torch aloft, is a rare instance of his treatment of the male figure."^{1/}

"The First Division War Memorial, Washington, D. C., 1924."^{2/}

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^{1/} The American Federation of Arts. Art School Directory. Volume I, for the years 1939-40. Washington, D. C.: The American Federation of Arts, Inc., 1939. 11-158 pp.

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4/ loc. cit.

5/ loc. cit.

6/ loc. cit.

List of Schools for Education in Sculpture.^{1/}

1. Miss Anna Clarke, Executive Secretary Art Students League of New York, 215 West 57th Street, Borough of Manhattan, New York.
2. Mr. Stefan Hirsch, Chairman, Bennington College, Art Division, Bennington, Vermont.
3. Mr. J. C. Eghert, Director of University Extension, Columbia University, School of Architecture, University Extension, West 114th to 121st Sts., Borough of Manhattan, New York.
4. Mr. Guy Gayler Clark, Director Cooper Union Art Schools, Eighth Street and Fourth Avenue, Borough of Manhattan, New York.
5. Mr. Ralph G. Gulley, Head of Department, Rensselaer Polytechnic Institute Department of Architecture, Troy, New York.
6. Mr. William James, Acting Director, School of The Museum of Fine Arts, Fenway and Museum Road, Boston, Massachusetts.
7. Mr. Gordon L. Reynolds, President, Massachusetts School of Art, 364 Brookline Avenue, Boston, Massachusetts.

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- (a) Select pictures for bulletin board, reflectoscope or poster.
- (b) Select clear prints.
- (c) Ask before you cut or borrow pictures. You are worse than dishonest if you do otherwise.
- (d) Trim pictures neatly. Leave information attached. If information was on another page, clip it to the print.

Mounting Pictures

1. Always consult the teacher before you mount anything.
2. A picture may be mounted, placed in an envelope, or placed in a folder.
3. Permanent Mounting.
 - a. Place print on mount.
 - b. The lower margin should be wider than the top or sides; the side margins should usually be equal unless there is a good reason for changing.
 - c. Lightly outline the corners of the print on the mount.
 - d. Place picture face down on an old newspaper.
 - e. Brush the entire back with a thin coating of creamy paste.
 - f. Quickly place top edge of print in place on mount, and smooth print from the top.

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g. Place a paper towel on print and using the thin edge of the hands press the print from the center to the edge of the mount. This removes air bubbles.

(1) Remove excess paste with damp towel.

h. Hold mount to eye level to look for bubbles, and smooth again if necessary.

i. Place a clean towel over the print. Cover with a heavy weight.

j. Leave it overnight to dry. Large prints may need a day or two.

4. Temporary Mounting.

a. Apply paste only in the corners, or

b. Apply paste along the top and bottom edges.

c. Place top edge of print on mount first, and smooth print to lower edge.

d. Proceed as in permanent mounting.

5. A small amount of information can be pasted below the print.

6. If a large amount of valuable information accompanies the print, consult the teacher. It may be mounted, or placed in a folder, or an envelope.

7. Label everything neatly in ink. Use capital and small letters.

1/ Leone L. Winslow and Others. A Tentative Course of Study, Art for Junior High Schools, (Grades Seven to Nine Inclusive). (Mineographed). 1944, p. 146. Baltimore, Maryland; City of Baltimore, Department of Education.

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List of American Sculptors 1/

1. Horatio Greenough

First trained sculptor in this country. Studied under Thorwaldsen who was sculptor of "Lion of Lucerne" and of "The Divine Healer" in Hopkins Hospital. Made a statue of Washington posed as Olympian Zeus now in Smithsonian.

2. Hiram Powers

Greek Slave

3. Thomas Crawford

Statue of Liberty on Dome of Capitol, Washington.

4. John Q.A. Ward

Washington

Indian Hunter

Monument to Henry Ward Beecher

5. Augustus Saint-Gaudens

Memorial to Admiral Farragut

Statue of Lincoln, Lincoln Park, Chicago

The Puritan

Figure over grave of Mrs. Henry Adams, Rock Creek

Cemetery, Washington

Shaw Memorial

Robert Louis Stevenson

1/ Leone L. Winslow and Others. A Tentative Course of Study, Art for Junior High Schools, (Grades Seven to Nine Inclusive). (Mimeographed). 1944, p. 146. Baltimore, Maryland: City of Baltimore, Department of Education.

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Statue of Lincoln, Lincoln Park, Chicago
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Figure over grave of Mrs. Henry Adams, Rock Creek Cemetery, Washington
Shaw Memorial
Robert Louis Stevenson
- See also L. Winthrop and Others. A Tentative Course of Study, Art for Junior High Schools, (Grades Seven to Nine Inclusive). (Memoirs), 1944, p. 146. Baltimore, Maryland: City of Baltimore, Department of Education.

General Sherman

Homer Saint-Gaudens

6. Daniel Chester French

11. Minute Man, Concord, Massachusetts

Memorial to Alice Freeman Palmer

"Alma Mater" Peace

"In Flanders Fields"

12. Death and the Sculptor

Lincoln Statue in Memorial, Washington

College Youth--Christian Student

"Lincoln", Lincoln Memorial, Washington, D. C. - omit

13. "Angel of Death and the Sculptor" 1/

7. Herman Atkins McNeil

The Sun Vow

Coming of the White Man

14. Ezra Cornell--Cornell University

8. Anna Coleman Ladd

Fountain Eros and Anteros

The Dance Dionysos

9. Herbert Adams

Memorial to Dr. Welch Ambue Circle, Washington ✓

15. Memorial to Charles Pratt

10. Lorado Taft

Fountain of the Great Lakes

1/ Leone L. Winslow and Others, op. cit., p. 79.

✓ Leone L. Winslow and Others, op. cit., p. 79.

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Black Hawk

Columbus Fountain

Group of the Blind

11. Cyrus Edwin Dallin

Appeal to the Great Spirit

A Signal of Peace

Medicine Man

12. Paul Wayland Bartlett

Michelangelo

Benjamin Franklin

Lafayette

13. Frederick William MacMonnies

Nathan Hale

Shakespeare

Bacchante

14. Gutzon Borglum

Portrait of Lincoln

Old Trail Drivers

Mares of Diomedes

Mt. Rushmore,--Black Hills, S. D.

General Sheridan, Columbus Circle, Washington ^{1/}

15. Solon Borglum

On the Border of the White Man's Land

Bucky O'Neill

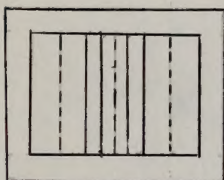
One in a Thousand

^{1/} Leone L. Winslow and Others, op. cit., p. 79.

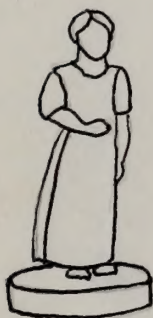
Soap Sculpture ^{1/}

1. Discuss materials required for soap sculpture: large fresh cake of Ivory Soap, a paring knife, small pen knife or some similar tool, water glass (sodium silicate), common pins, several sheets of newspaper, and a paper bag.

2. Draw three rectangles $4\frac{1}{2}" \times 2\frac{1}{2}"$, $1\frac{1}{2}" \times 4\frac{1}{2}"$, $4\frac{1}{2}" \times 2\frac{1}{2}"$ on 6" x 9" arithmetic paper. Draw vertical lines through the center of each rectangle to help to keep the drawing symmetrical.



3. Select your subject. Draw the front, side, and back views in the rectangles.



If it is a figure, make it simple. Draw the arms against the body. The legs should touch each other or have some support between. If the figure has legs, allow a $1/2"$ base.

If it is an animal with standing legs, plan for a $1/4"$ base and a partition under the body and between the two sets of legs.



Avoid complicated designs which have too much detail.

4. Read pp. 10-32 in Soap Carving by Lester Gaba. Study pictures.

^{1/} Lester Gaba, Soap Carving. New York: The Studio Publications, Inc., 381 Fourth Avenue, pp. 10-32.

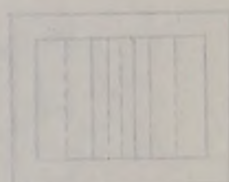
Soap Sculpture I

1. Discuss materials required for soap sculptures:

large trash can of Ivory Soap, a paring knife, small pen knife or some similar tool, water glass (sodium silicate), common pine, several sheets of newspaper, and a paper bag.

2. Draw three rectangles $4\frac{1}{2}" \times 2\frac{1}{2}"$, $1\frac{1}{2}" \times 4\frac{1}{2}"$, $4\frac{1}{2}" \times 2\frac{1}{2}"$ on 5" x 9" arithmetic paper. Draw

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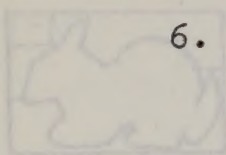


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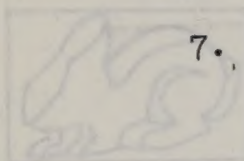
Study pictures.

5. A fresh cake of white soap that has an even texture is best. Large size Ivory has only small notches compared to Swan's large cut. Good home-made soap is all right if you have it. Rectangular soap is best to carve.

6. Mend a small hole. Moisten and mix shavings of soap until pasty. Press into hole and allow to dry.

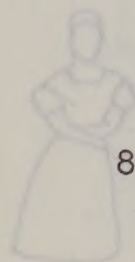


7. Smooth the rough surface later.



7. Join two pieces of soap. Carve parts of sculpture separately. Spread the two surfaces to be joined with a solution of sodium silicate (water glass) and press quickly together. If the pieces are large, press with common pins diagonally across the join. Do this from either side, but do not press the pins too closely together.

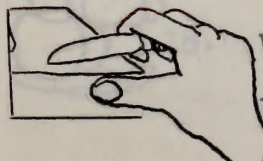
8. Smooth off all lettering, projecting edges and corners with your knife. Do not slice them.



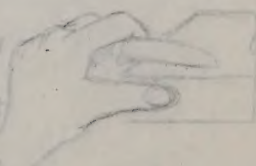
9. GO SLOWLY. Soap cuts easily and it is difficult to mend.



10. Brace your thumb against the soap just as you would if you were paring fruit. Don't hold the paring knife like a pen or pencil. This is permissible only when you are scoring a



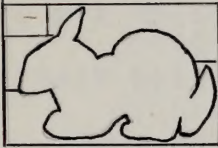
5. A fresh cake of white soap that has an even texture is best. Large size Ivory has only small notches compared to Swan's large cut. Good home-made soap is all right if you have it. Rectangular soap is best to carve.
6. Mend a small hole. Moisten and mix shavings of soap until pasty. Press into hole and allow to dry. Smooth the rough surface later.
7. Join two pieces of soap. Carve parts of sculpture separately. Spread the two surfaces to be joined with a solution of sodium silicate (water glass) and press quickly together. If the pieces are large, press common pins diagonally across the join. Do this from either side, but do not press the pins too closely together.
8. Smooth off all lettering, projecting edges and corners with your knife. Do not slice them.
9. GO SLOWLY. Soap cuts easily but it is difficult to mend.
10. Brace your thumb against the soap just as you would if you were paring fruit. Don't hold the paring knife like a pen or pencil. This is permissible only when you are scoring a



line for a sharp edge.

11. Never cut away from you. You will have no control over the knife. It is very apt to slip and ruin your carving.

12. Allow for projections such as tails, ears, etc.



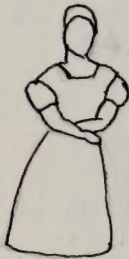
from the start. Outline them with the tip of your knife, and cut away from them as you progress with the body of the figure.

13. Scoring. Cutting straight into the soap with the tip of your knife will define the edges of projections.



14. Pare away the unwanted soap.

15. Carve the soap gradually, turning it over frequently to see it from all angles. Compare it often with the model or the drawings that you are following.



- a. Begin to find the planes.
- b. Observe that the head is much smaller than the body.
- c. Often the shoulders are the widest part of a figure.
- d. The lower edge of a skirt is often as full as the cake of soap will allow.

16. Leave the carved detail of the projections until last.



17. A pen knife is good for making small details.
18. Poster or opaque water-colors may be used on soap.

19. A thin coating of transparent lacquer will protect soap. Two thin coats will permit gentle washing.

20. Soap carving has been used for window decoration, room ornaments, and bath soap. See program which will take place during the last six days. pages 40-80 for the many ways in which Mr. Gaba has used soap.

21. Bath soaps are made from soft soap that has been poured into molds that were cast from carved soap. There is usually a ridge

Letter writing.--

1. Write to a Chamber of Commerce for a postcard picture of a statue that is needed. Ask English teacher if you may receive English credit for this.
22. Soap carving and modeling Plasteline help us to see more clearly the planes to be found in all three dimensional objects.
23. Soap carving has been mistaken for wax work.
24. Carving in ivory and bone is similar to soap carving. Where would we see ivory and bone carving?
3. Write to one of the art schools listed on the S.S. G. List of Schools for Education in Sculpture for information about courses and costs.

Written report.--

1. Find pictures of two buildings which have sculpture. Write why you think that the sculpture is good or poor. Consider the size, shape, line, and purpose.

Optional Related Activities

A Committee will work with the teacher to select those talks, exhibits, reports, and demonstrations which are good enough to be presented to the class in the summary program which will take place during the last six days. No talk will be over three minutes in length.

When you have finished the work assigned, you may like to choose one or more of the following activities. (Each item was typed on a 5" x 8" card.)

Letter writing.--

1. Write to a Chamber of Commerce for a postcard picture of a statue that is needed. Ask English teacher if you may receive English credit for this. See Special Study Guide, List of American Sculptors.
2. Write to: Caproproni Galleries of Amedeo Incorporated, 1914 Washington Street, Boston, Massachusetts for a free catalogue.
3. Write to one of the art schools listed on the S.S. G. List of Schools for Education in Sculpture for information about courses and costs.

Written report.--

1. Find pictures of two buildings which have sculpture. Write why you think that the sculpture is good or poor. Consider the size, shape, line, and purpose

of both the sculpture and the building.

2. Write why you consider two monuments to be good.

Choose sculpture in either Elmwood or Hope Cemetery.

3. Write a description of two outstanding pieces of work by a woman sculptor. See one of the following books:

(1) Hoffman, Malvina. Heads and Tales (Aldrich Public Library)

(2) Proske, Beatrice Gilman. Brookgreen Gardens Sculpture

(3) Hoffman, Malvina. Sculpture Inside and Out. (Ask Art Supervisor.)

4. List five professions that use modeling. Explain how the modeling is used.
5. List three reasons why you consider a particular piece of sculpture beautiful.

Creative writing.--

1. Write a play around the story of Cyrus E. Dallin's Paul Revere.

2. Write a play on the selection of a piece of sculpture for a special location here in Barre.

Oral Report.--

1. Be prepared to make an oral report. Describe the cast of a section of the Parthenon frieze. Tell what it represents. Ask permission to see it at

the high school office. letter carver, and polisher.

2. Explain one method of making a mask. (18:20,30)
Be prepared to make an oral report.
3. Describe the materials of ancient masks. Tell why the masks were made. See pictures and notes explaining the pictures. (16:94-97), (17:92-93), (19:21-23). Be prepared to make an oral report.
4. Explain some process. (1:202-203), (9:24-27), (11:14-18), (11:18-26), (11:36), (11:40-44), (11:58-64), (11:68), (11:72). Choose one. Be prepared to make an oral report. See Special Study and Activity Guides, Plaster of Paris, and The Waste Mould (of a bust, for example).
5. Be prepared to make an oral report on any one of the listed Study Guide References.
6. Report the information of: salary range; experience required of stonecutters; and the dangers of the stone cutting trade. Use charts provided by the committee. This is an oral report.

Chart.-- Draw two large skeletons (front and side view).

1. Make a chart to show the experience required of a sculptor, a letter carver, and a polisher. Inquire courteously at the office of Cook, Watkins, and Patch. (Any other stonemason's office will do.)
2. Make a chart to show the salary range of these

3. Draw and shade the figure side view. Show the

- three workers (sculptor, letter carver, and polisher) in Barre. Visit the Barre Granite Association, Inc., 102 North Main St., to find the information.
3. Make a chart to show that the death rate has decreased during the last five years. Inquire for information by writing to: Department of Public Health, Burlington, Vermont. C/o Dr. Dalton or Dr. Aiken.
 4. Make a chart showing an increase in the use of dust collecting (or removing) devices over a period of the last five years. Inquire for information at: Department of Public Health, Burlington, Vermont. C/o Dr. Dalton or Dr. Aiken.

Drawing.--

1. Make a scale drawing of an armature for an animal. Give dimensions. Label it. Use photographs or real model for proportions. Use white drawing paper 9 by 12 inches. Label with title, book, and page number, if a book is used.
2. Draw two large skeletons (front and side view). Divide by head measurement. Use wrapping paper 24 by 36 inches. Use black water-color or black ink and a brush for outline. Ask the Art Supervisor for: (3:155,162,176,182,188). Label with title, book, and page number.
3. Draw and shade the figure side view. Show the

3. direction of the planes of the body. Draw a red line from the ear to the ankle bone. Use black water-color or black ink and a brush for the outline of the figure. Use wrapping paper 24 by 36 inches. Ask the Art Supervisor for: (3:73).
Label with title, book, and page number.
4. Draw an arm. Use black water-color or black ink and a brush for outline. Outline bone in red water-color. Use one of these: (3:71,73,103). Ask the Art Supervisor for the reference. Label with title, book, and page number.
5. Draw a neck. Use one: (3:109,111). Outline with black water-color or use black ink and a brush. Use wrapping paper 24 by 36 inches. Ask the Art Supervisor for the reference. Label with title, book, and page number.
6. Draw a head. Use one: (3:122,127). Outline with black water-color or ink and use a brush. Use wrapping paper 24 by 36 inches. Ask the Art Supervisor for the reference. Label the chart with the title, book, and page number.
7. Draw a series of cartoons showing steps in one of the processes that the class has studied. Use Manila drawing paper 12 by 18 inches and water-color. Use one color and black.

8. Draw a poster advertising the sculpture made in Barre. Use Manila drawing paper 12 by 18 inches. Use black and one color in water-colors. Use few words. Make the picture large and simple. It should be easily understood at a distance the length of the class room.

Exhibits.--

1. Borrow some wood-carving tools. Letter information on cards or papers of a uniform size. Each card should name a tool and its use. Arrange a table exhibit.
2. Borrow tools used in the process of making a stone statue. Letter information on cards or papers of a uniform size. Each card should name a tool and its use. Arrange a table exhibit. One, two, or three people could work on this depending upon the amount of available tools. Be sure that each tool is labeled (inconspicuously) with adhesive tape which bears the owner's name.
3. Borrow molded and carved objects from members of the class. Letter information on cards or papers of a uniform size. Each card should name the material and the process that was used. For example: Soap (molded), Terra-cotta (molded and kiln-baked clay). Be sure that each piece is

labeled in an inconspicuous place with a small strip of adhesive tape bearing the name of the

All of the omitted words or phrases appear in the column at the left of the page. Show that you know which word or phrase has been omitted from each blank by putting the number of the blank in the proper parenthesis at the left. For example, 6 is placed in front of the word omitted from blank six.

- blank six. ¹
- | | |
|-------------------------|--|
| () pliers | Firmly twisted wire is used to make the 1_____. |
| (3) hands | A sculptor's measuring instrument is his 2_____. |
| () clay | A sculptor uses his 3_____ to measure the slant of the planes on a dog's head. |
| (5) wooden tool | Small amounts of clay, say he removed with 4_____. |
| (4) tool of looped wire | A sculptor uses his 5_____ to make clay edges sharper. |
| () armature | The sculptor paints his wire supports with 6_____ to prevent rusting. |
| () knife | |
| (2) calipers | |
| () foot ruler | |
| () modeling stand | |
| (6) Brunswick Black | |

¹ Roy S. Billett, Fundamentals of Secondary-School Teaching with Emphasis on the Unit Method, p. 626. Boston: Houghton Mifflin Company, 1946.

Pre-test and Achievement-test

All of the omitted words or phrases appear in the column at the left of the page. Show that you know which word or phrase has been omitted from each blank by putting the number of the blank in the proper parenthesis at the left. For example, 6 is placed in front of the word omitted from blank six.^{1/}

- | | | |
|-------------------------|---|--|
| () pliers | 1 | Firmly twisted wire is used to make the 1_____. |
| (3) hands | | |
| () clay | 2 | A sculptor's measuring instrument is his 2_____. |
| (5) wooden tool | | |
| (4) tool of looped wire | 3 | A sculptor uses his 3_____ to measure the slant of the planes on a dog's head. |
| (1) armature | 4 | Small amounts of clay may be removed with 4_____. |
| () knife | | |
| (2) calipers | 5 | A sculptor uses his 5_____ to make clay edges sharper. |
| () foot ruler | | |
| () modeling stand | | The sculptor paints his wire supports with 6_____ to prevent rusting. |
| (6) Brunswick Black | | |

^{1/} Roy O. Billett, Fundamentals of Secondary-School Teaching with Emphasis on the Unit Method, p. 626. Boston: Houghton Mifflin Company, 1940.

- (5) good clay
- () Magnifying glasses
- (1) even lighting
- (3) bone construction
- (2) small statues
- () paper plans
- () good exercise
- (4) large mirrors
- () plaster casts
- () animal stories

- () solid
- () painted
- () poured
- (1) modeled
- (3) separated
- (5) rolled
- (2) destroyed
- () baked
- () saved
- (4) splashed

A sculptor's modeling stand has a movable top to make 1_____ possible.

A sculptor often makes 2_____ directly from living models.

The sculptor must know 3_____ to model animals.

A sculptor sometimes uses 4_____ to help him to find mistakes in his modeling.

The preparation of 5_____ is a necessary first step in the construction of a statue.

A man who makes plaster casts must have 1_____ statues when he was a student.

The clay statue is 2_____ when the plaster of Paris mold is made.

Brass plates are used to keep the sections of casts 3_____.

The plaster of Paris is 4_____ over the clay figure.

A plaster cast is 5_____ after each amount of plaster of Paris has been added to the mold.

- () modeling
- (1) "the public"
- () "the educated"
- (2) Indians
- () refinement
- () salesmanship
- (3) democracy
- (5) self-government
- (4) people
- () revolution

- (3) skill
- () beauty
- (5) material
- (4) planning
- () modeling
- () practice
- (1) religion
- () pocketbook
- () equipment
- (2) carving

16 An idea well expressed in stone
is understood by 1_____.

Cyrus E. Dallin's Medicine Man is
valuable because it helps us to
17 understand 2_____.

The Lincoln statue of the Lincoln
Memorial represents our idea of
18 3_____.

In addition to a knowledge of the
skills of sculpture an artist
19 must know 4_____.

The statue of Paul Revere repre-
sents our early strivings toward
20 5_____.

21 The earliest masks were made to
encourage 1_____.

Soap carving helps us to under-
22 stand 2_____.

Carving requires more 3_____
23 than modeling.

The first step in the preparation
24 for carving is 4_____.

A sculptor chooses his tools to
25 suit his 5_____.

- () alcohol The mold for a bronze statue is
 26 made of 1 _____.
- () plaster of Paris The material used to prevent these
 molds from sticking together is
 27 2 _____.
- () wax Bronze statues are colored with
 28 3 _____.
- () armature The workman uses 4 _____ on a
 29 bronze statue before he colors it.
- (5) ridges The workman must remove the
 30 5 _____ by the mold before a
 bronze statue can be finished.
- (2) brickdust
- (3) acid

- () humorous 31 Sculpture should give us the feel-
 ing that it is 1 _____.
- (2) sad The panels on the Robert Burns
 32 The best sculpture is 2 _____ in
 its purpose.
- (3) natural The Youth Triumphant is in
 33 The position of Gutzon Borglum's
 seated Lincoln is more 3 _____
 than that of other statues.
- () stiff Daniel Chester French's angels are
 34 4 _____.
- () temporary Max Kalish's statue of Lincoln is
 35 5 _____.
- (2) dignified
- (4) comforting
- (1) permanent
- () awkward
- (5) active

(4) window decorators

(5) engineers

(2) doctors

() tourists

() masons

(3) architects

() dentists

() athletic directors

(1) sculptors

() park commissioners

(1) three dimensions

(2) bas-relief

() line

() terra-cotta

() black and white

(4) planes

() marble

(3) full round

(5) proportion

() style

Barre's granite industry
36 attracts 1 _____ to live here.

Modeling is recommended by
37 2 _____ as a hobby.

A city should consult 3 _____
38 when it considers the location
of a new monument.

Soap carving has been used by
39 professional 4 _____.

A statue should be set up in a
40 park by 5 _____.

41 Sculpture is design in 1 _____.

42 The panels on the Robert Burns
monument are in 2 _____.

The Youth Triumphant is in
43 3 _____.

The design in sculpture is
44 arranged in 4 _____.

A sculptor must constantly
45 check his work to see that it
is in 5 _____.

A sculptor must have 3 _____
to help him make the planes
of the statue.

- (2) one head 46 The adult figure is 1_____ tall.
- (4) three heads 47 The waist is 2_____ wide.
- () six heads 48 The shoulders are 3_____ wide.
- () one and a half heads 49 The waist is 4_____ down from the top of the head.
- (5) four heads 50 The hips are 5_____ up from the feet.
- () one and three-quarters heads 51
- () eight heads 52
- () five heads 53
- (3) two heads 54
- (1) seven and a half heads 55

- (3) books 56 Sculptors often use 1_____ in addition to models.
- () tools 57
- (5) light 58 Sometimes one-half of the money that the sculptor receives for his statue is used for 2_____.
- () soap 59
- (1) photographs 60 The sculptor finds much of the necessary historic detail through the use of 3_____.
- () museum 61
- () puppets 62 The men who design flat irons, radios and cars often use 4_____.
- (2) casts 63
- (4) clay 64 A sculptor must have 5_____ to help him make the planes of the statue.
- () armatures 65

1/ Roy C. Billett, *Fundamentals of Secondary-School Teaching with Emphasis on the Unit Method*, p. 626. Boston: Houghton Mifflin Company, 1940.

2/ Op. cit., p. 624.

In the blank before each statue in the left-hand column, write the number from the right-hand list, corresponding to the name of the sculptor of the work. The same name may be used more than once. Some names may not be used at all.^{1/} For example, 3 is placed to the left of a statue made by Augustus Saint-Gaudens.^{2/}

- | | |
|-------------------------------------|---------------------------|
| (2) the Lincoln of Lincoln Memorial | 1. Cyrus E. Dallin |
| (4) Robert Burns | 2. Daniel Chester French |
| (2) Death and the Sculptor | 3. Augustus Saint-Gaudens |
| (1) Paul Revere | 4. Elia Corti |
| (3) The Peace of God | 5. Max Kalish |
| (1) The Appeal to the Great Spirit | 6. Gutzon Borglum |

^{1/} Roy O. Billett, Fundamentals of Secondary-School Teaching with Emphasis on the Unit Method, p. 626. Boston: Houghton Mifflin Company, 1940.

^{2/} Op. cit., p. 624.

In the blank before each phrase in the left-hand column, write the number from the right-hand list, corresponding to the name of the sculptor who is described by the phrase. The same name may be used more than once. Some names may not be used at all. 1/

- | | | |
|---|----|---------------------------|
| (2) A bus designer | 61 | 1. Augustus Saint-Gaudens |
| (1) "first" sculptor of the United States | 62 | 2. Gutzon Borglum |
| (3) A friend of May Alcott | 63 | 3. Daniel Chester French |
| () A designer of carved linoleum bas-reliefs | | 4. Cyrus E. Dallin |
| () A designer of terra-cotta figures | | |
| (2) A designer of mountain sculpture | 64 | |
| (1) father of coin designing | 65 | |
| () a sculptor of animals | | |

1/ Roy O. Billett, loc. cit.

CHAPTER VII

THE RESULTS OF TEACHING THE REVISED UNIT ON SCULPTURE

The Third Unit

The pupils.-- The third unit was given to the 99 pupils of the four seventh grades of the public schools of Barre, Vermont during the winter of 1945.

The teachers.-- Mr. Curtis has the seventh grade at Lincoln. The other teachers are the same.

The Intelligence Quotients.-- These figures were not too helpful to the art supervisor. The tests were given early in the winter, but the results were not available until the unit was almost completed.

A comparison of the intelligence quotients with the results of the pre-test and the achievement test show very little correlation.^{1/}

The unit and the delimitation.-- The unit and the delimitation are the same in the second and third units.

The unit-assignment.-- The main part of the unit-assignment is the same as that of the second unit.

The number of models.-- The photographs show a complete representation of the total clay modeling with the exception of the work of Mrs. Sawyer's class. Seven models are

^{1/} See tables 3, 4, 5, and 6 in the Appendix.

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¹ See tables 3, 4, 5, and 6 in the Appendix.

not shown. The reasons for this are: one pupil was ill; two pupils moved away; and the other four had probably been absent some of the time.

There was an art exhibition in May and the room teacher had all the models destroyed that were not completed.

Soap carving.-- All of the classes did some soap carving. Mrs. Wales' and Miss Sinclair's classes both carved fish since they were studying fish in geography.

The other two groups carved a miscellaneous collection of rabbits, dogs, horses, flowers, and figures.

It was possible to photograph only those shown with the clay models of Mrs. Sawyer's class.

Correlation with history and geography.-- A study of the choices and the photographs of the models will show that the selections come from the Colonial period, the Civil War period, and the present day.

The choices were made with the approval of the teachers who teach history and geography.

The choice had to be important for a half-year of study.

The time.-- Art is taught during one fifty-minute period each week. Mr. Curtis's class lost two periods due to the unexpected closing of school. Mr. Curtis later gave the pupils as much opportunity as he could to make up the time.

Q. Billett, Fundamentals of Secondary-School Teaching with Emphasis on the Unit Method, p. 237. Boston: Houghton Mifflin Company, 1943.

The test.--- The test for unit one has been carefully studied. Every question has been checked with the new delimitation. The wording has been changed to avoid clues. The questions which everyone had right are omitted. Those which everyone missed are re-worded or omitted. Only those ideas which could be best tested by a pencil and paper evaluation have been selected.

The pre-test.--- The same test is given as a pre-test and as an achievement test.

The growth of 99 seventh grade pupils was measured by an objective test of 65 questions. The range of scores is from 1 to 20. The average growth is represented by a score of 11.58 for which the standard of error is 0.41. The standard deviation is 4.09 for which the standard error is 0.29.^{1/}

For all practical purposes the ranges of the five groups in terms of scores are: Group I, 18-21; Group II, 14-17; Group III, 10-13; Group IV, 6-9; Group V, 1-5.^{2/} The graph shows that the upper group is reduced 0.44 of a standard deviation, and the lower group is extended 0.09 of a standard deviation from the normal distribution.

To the nearest integer, the normal distribution of 99 pupils is: Group I, 7 pupils; Group II, 24 pupils,

^{1/} See Appendix P, for complete figures.

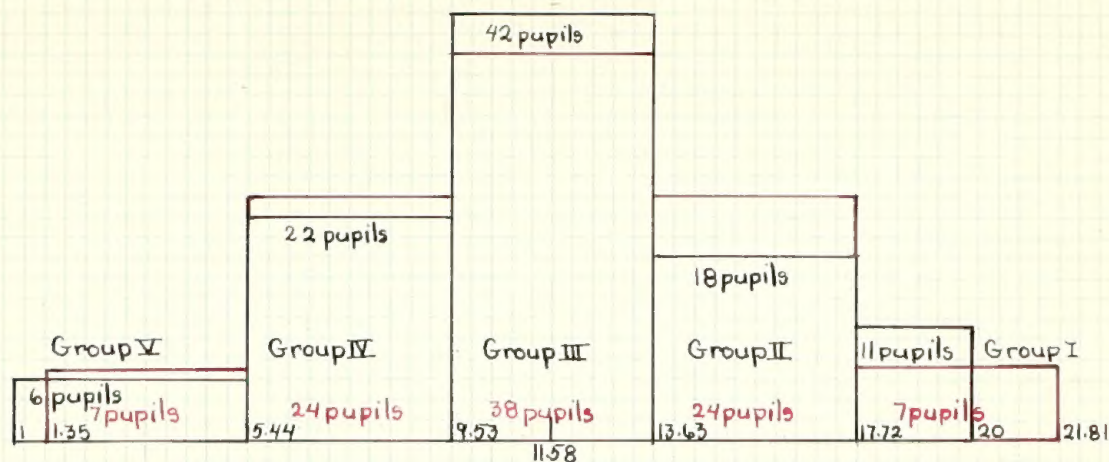
^{2/} Roy O. Billett, Fundamentals of Secondary-School Teaching with Emphasis on the Unit Method, p. 637. Boston: Houghton Mifflin Company, 1940.

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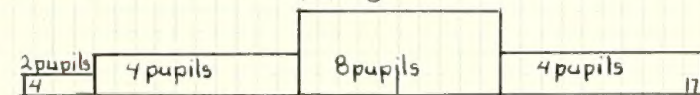
The pre-test.-- The same test is given as a pre-test and as an achievement test. The growth of 99 seventh grade pupils was measured by an objective test of 65 questions. The range of scores is from 1 to 30. The average growth is represented by a score of 11.58 for which the standard of error is 0.41. The standard deviation is 4.09 for which the standard error is 0.39.

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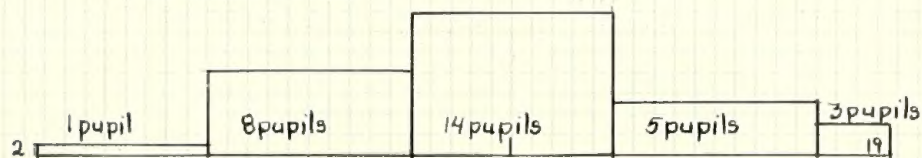
See Appendix 2, for complete figures.
Roy O. Bisset, Fundamentals of Secondary-School Teaching with Emphasis on the Unit Method, p. 637. Boston: Houghton Mifflin Company, 1940.



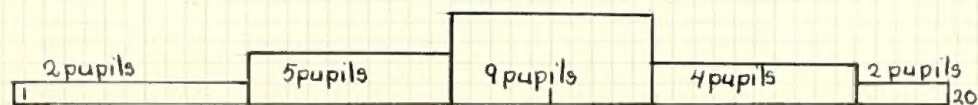
— The actual distribution of growth of the combined classes from the pre-test
 — Normal distribution of pupil growth. ✓



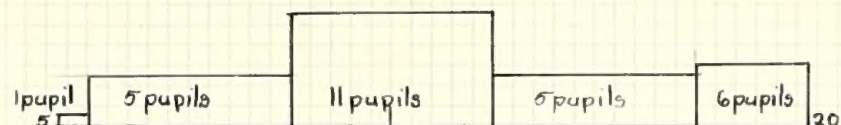
Miss Sinclair's Grade



Mrs. Sawyer's Grade



Mrs. Wales' Grade



Mr. Curtis' Grade

Figure 2. The results of the pre-test

✓ Roy O. Billett, Fundamentals of Secondary-School Teaching With Emphasis On The Unit Method, p. 637. Boston: Houghton Mifflin Company, 1940.

Group III, 38 pupils; Group IV, 24 pupils; Group V, 7 pupils. The actual distribution had: 3 too many pupils in Group I; a deficiency of 6 pupils in Group II; 4 too many pupils in Group III; a deficiency of 2 pupils in Group II; and a deficiency of 1 pupil in Group V.^{1/}

The analysis of the test.-- A chart was made as follows:^{2/}

Questions 1, 6, 15, 18, 21, 22, 33, 35, 52, 57, 59, 64, and 65 are evidently poor questions and should eventually be revised. Everyone missed questions 52, 60, 64, and 65. Questions 3, 4, 17, 38, 49, and 54 show percentages that decrease as they should. The remaining questions show a decrease in percentages from the highest to the lowest but the percentages are not in perfect order.

The green graph in the Appendix shows the numbers of the group who had each question right.^{3/}

The achievement test.-- The growth of 98 seventh grade pupils was measured by the same objective test. The range of scores is from 5 to 38. The average growth is represented by a score of 19.84 for which the standard error is 0.70. The standard deviation is 0.50.^{4/}

^{1/} Roy O. Billett, loc. cit.

^{2/} Ibid., pp. 628-630.

^{3/} Figure 5 in the Appendix.

^{4/} See Appendix Q, for complete figures.

For all practical purposes the ranges of the five groups in terms of scores are: Group I, 31-38; Group II, 24-30; Group III, 17-23; Group IV, 10-16; Group V, 3-9.^{1/} The graph shows that the upper group is extended 0.12 of a standard deviation beyond the normal distribution.

To the nearest integer, the normal distribution of 98 pupils is: Group I, 7 pupils; Group II, 24 pupils; Group III, 38 pupils; Group IV, 24 pupils; Group V, 7 pupils. The actual distribution has: a deficiency of 2 pupils in Groups I and V; 3 pupils too many in Groups II and IV; and a deficiency of 4 pupils in Group III.^{2/}

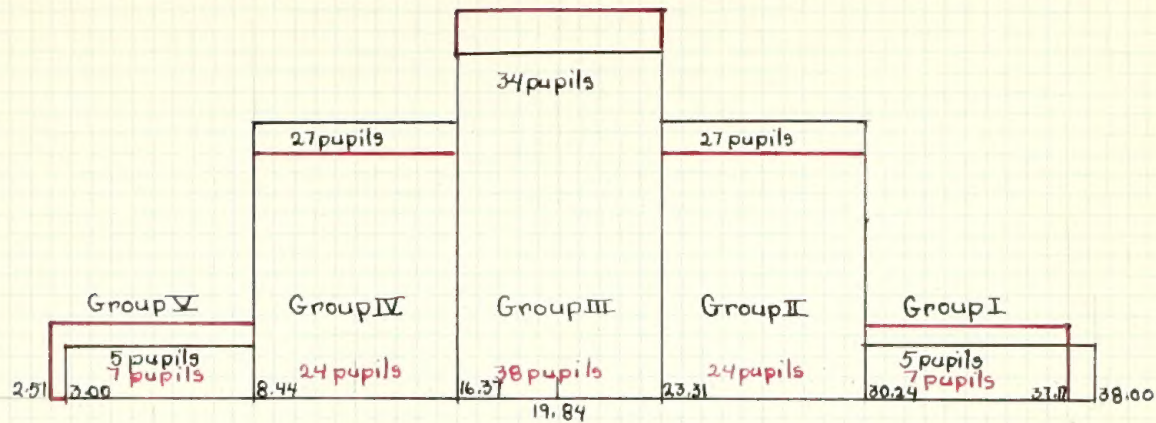
The analysis of the test.-- A chart was made as follows:^{3/}

Questions 5, 22, 23, 24, 27, 39, 40, 52, 58, 64, and 65 should be revised or discarded. Questions 22, 52, 64, and 65 were also poor in the pre-test analysis. Almost everyone missed questions 64 and 65. These questions were based on the pupil's reports which were not very well given. The classes are not accustomed to this method of acquiring information. Questions 1, 2, 3, 4, 5, 7, 8, 14, 16, 20, 28, 29, 31, 45, 50, 51, 59 show percentages that decrease as they should. The remaining thirty-six questions show a

^{1/} Roy O. Billett, loc. cit.

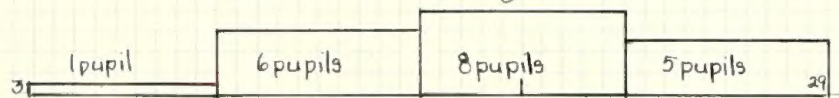
^{2/} Ibid.

^{3/} Ibid., pp. 628-630.

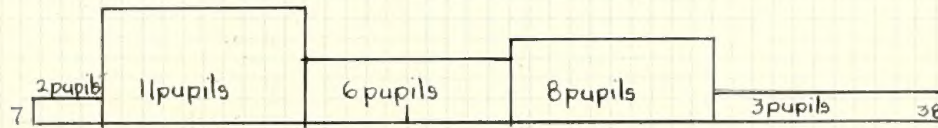


— The actual distribution of growth of the combined classes from the achievement test.

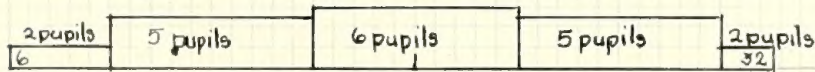
— Normal distribution of pupil growth.^{1/}



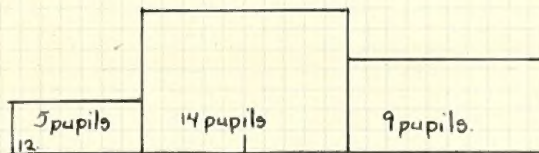
Miss Sinclair's Grade



Mrs. Sawyer's Grade



Mrs. Wales' Grade



Mr. Curtis' Grade

Figure 3. The results of the achievement-test.

^{1/} Roy O. Billett, *Fundamentals of Secondary-School Teaching With Emphasis On The Unit Method*, p. 637 Boston: Houghton Mifflin Company, 1940.



decrease in percentages from the highest to the lowest, but the percentages are not in perfect order. However, only eleven of these have more than one "misplaced" percentage.

The graph shows the growth made by the class on each question.^{1/} The greatest growth is shown on questions 1 and 56. The score on questions 25, 32, 36, 40, and 58 was less than that on the pre-test.

The lack of growth on many of the items is probably due to several facts. The art supervisor is not skilled in teaching the unit method. The reference material was available to each group for only two weeks. The pupils do not have unit work in any other subject, and they are not accustomed to learning from one another. There was not enough opportunity for discussion.

Analysis made by reading summaries written at the completion of the unit.-- Mrs. Wales' class wrote 154 items; there was a range of 37 items. Mrs. Sawyer's class wrote 117 items; there was a range of 33 items. Miss Sinclair's class wrote 91 items; there was a range of 17 items. Mr. Curtis's class wrote 135 items; there was a range of 37 items.

See Appendix, Table 2, for a complete record.

^{1/} See figure 5 in the Appendix.

decrease in percentages from the highest to the lowest, but the percentages are not in perfect order. However, only eleven of these have more than one "misplaced" percentage.

The graph shows the growth made by the class on each question. The greatest growth is shown on questions 1 and 56. The score on questions 25, 35, 36, 40, and 58 was less than that on the pre-test.

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completion of the unit.-- Mrs. Sales' class wrote 154 items; there was a range of 37 items. Mrs. Sawyer's class wrote 117 items; there was a range of 33 items. Miss Sinclair's class wrote 91 items; there was a range of 17 items. Mr. Gustie's class wrote 125 items; there was a range of 37 items.

See Figure 5 in the Appendix.

Table 1. Nineteen gains in knowledge claimed by not less than eleven per cent of all of the pupils in their summaries.

Gain in Knowledge	Percentage of pupils
"I know how to make an armature".....	68
"I know figure proportion which uses the head as a unit of measure".....	41
"I learned to model a figure in clay".....	31
"I learned to carve soap." (Almost everyone gave full directions).....	30
"A sculptor has to plan his work either on paper or with a small model".....	27
"I know how to model a head".....	24
"I have learned to prepare clay for modeling".	20
"You add the clothes and the decorative parts last".....	19
"I learned how to make tools which are helpful in modeling".....	18
"Cyrus E. Dallin made busts and statues of Indians".....	17
"I learned the process of making a bronze statue from a movie".....	16
"I learned the process of making a plaster cast from a movie".....	16
"I know there is a statue of Lincoln in the Lincoln Memorial".....	15
"Gutzon Borglum made the Mt. Rushmore Memorial in the Black Hills of South Dakota".....	15
"Four great sculptors are: Cyrus Dallin, Gutzon Borglum, Daniel French, and Augustus Saint-Gaudens".....	15
"It takes patience when you do soap carving so as not to break the pieces".....	14
"I learned about the tools used for making a statue".....	13
"I know the works and lives of famous sculptors"	12
"Gutzon Borglum carved Lincoln sitting down"..	11

See Appendix, Table 2, for a complete record.

Conclusions regarding the written summaries.-- Mr. Curtis's and Mrs. Sawyer's seventh grades have their

Table I. Nineteen gains in knowledge claimed by not less than eleven per cent of all of the pupils in their summer-

Percentage of pupils	Gains in Knowledge
68	"I know how to make an armature".....
41	"I know figure proportion which uses the head as a unit of measure".....
31	"I learned to model a figure in clay".....
30	"I learned to carve soap." (Almost everyone gave full directions).....
27	"A sculptor has to plan his work either on paper or with a small model".....
24	"I know how to model a head".....
20	"I have learned to prepare clay for modeling." "You add the clothes and the decorative parts last".....
19	"I learned how to make tools which are helpful in modeling".....
18	"Cyrus E. Dallin made busts and statues of Indians".....
17	"I learned the process of making a bronze statue from a model".....
16	"I learned the process of making a plaster coat from a model".....
15	"I know there is a statue of Lincoln in the Lincoln Memorial".....
15	"Gutzon Borglum made the Mt. Rushmore Memorial in the Black Hills of South Dakota".....
15	"Four great sculptors are: Cyrus Dallin, Gutzon Borglum, Daniel French, and Augustus Saint-Gaudens".....
14	"It takes patience when you do soap carving so as not to break the pieces".....
13	"I learned about the tools used for making a statue".....
12	"I know the works and lives of famous sculptors"
11	"Gutzon Borglum carved Lincoln sitting down".....

See Appendix, Table 2, for a complete record.

Conclusions regarding the written summaries. -- Mr.

Curtis's and Mrs. Sawyer's seventh grades have their

history with teachers who use a unit method in the eighth grade. Both classes have approximately twice the range of items stated by the other two classes. These facts indicate that they probably have more practice in writing summaries.

All the items correspond to those in the delimitation of the unit, but the percentage and range of the responses is small. One reason may be that summaries have not been used in art before.

A closer correlation of art with other subjects would give the boys and girls more opportunity to summarize their activities.

Conclusions.-- The unit method gives increasingly good results as the pupils and the teachers develop the skills which are necessary to an efficient performance of the many types of activity involved.

The unit method gives the art teacher an opportunity to organize the subject in such a way that it may eventually gain the respect of even those who still consider it a "frill".

Unit writing in art will eventually force teachers to write some of their own reference material. There is a great need for art literature to be written at various age or grade levels. Much of the present art literature is written for adults.

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Unit writing in art will eventually force teachers to write some of their own reference material. There is a great need for art literature to be written at various age or grade levels. Much of the present art literature is written for adults.

The definite use of reference material as a part of an art unit may eventually help teachers and superintendents to understand the value of art libraries in buildings or in central offices. The larger cities do have such libraries.

Further results.-- During the last two years, two of the eighth grades earned money and purchased one copy each of the books: Soap Carving, and Modeling for Amateurs.

When supplies are available three-drawer ply-wood files are to be made for each of the seventh and eighth grades.

Appreciation.-- Much credit is due to Mr. Curtis, Miss Irish, Miss Sinclair, Mrs. Sawyer, and Mrs. Wales for their cooperation in the presentation and development of the units.

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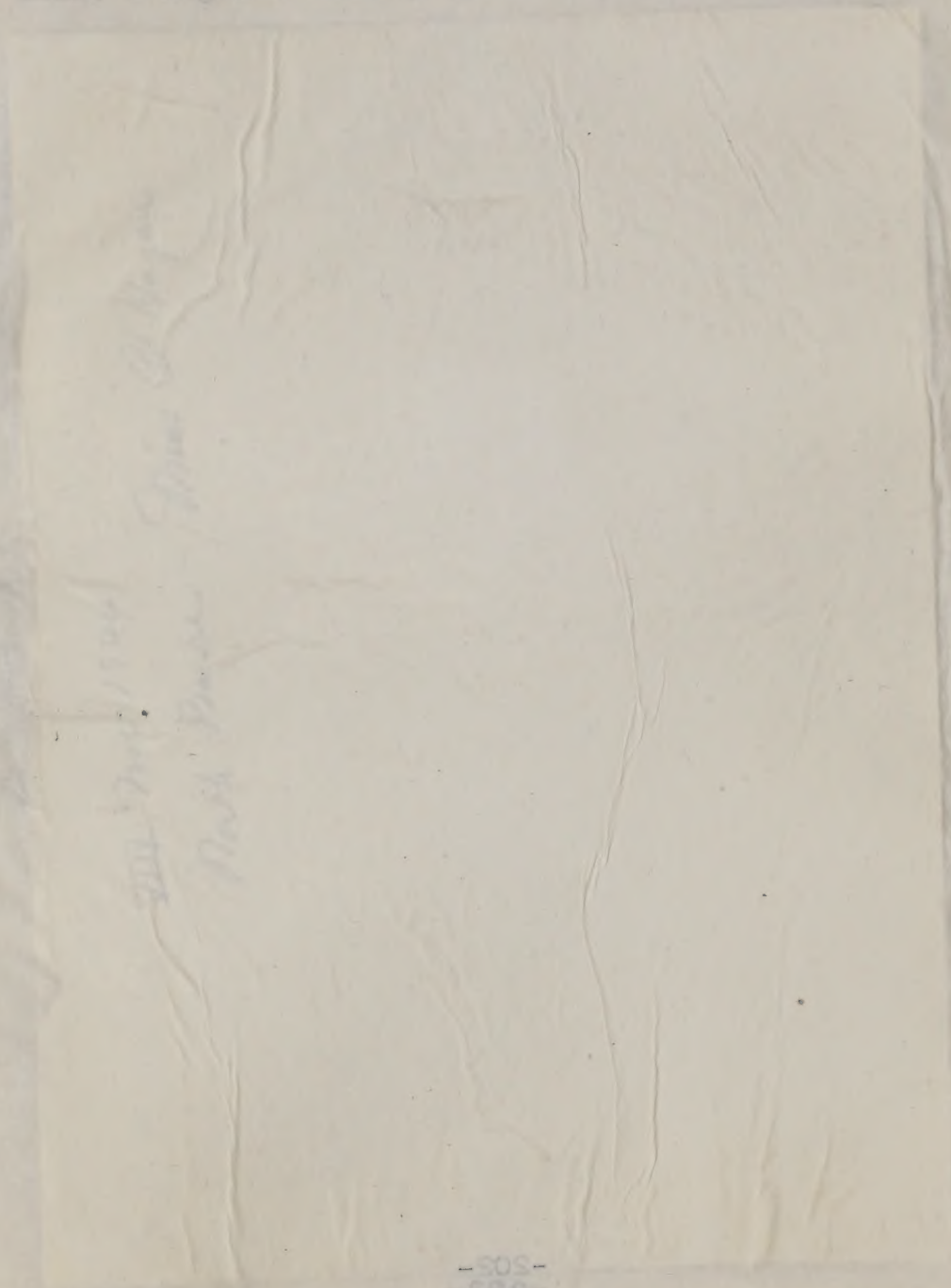
APPENDIX A

Eighth Grade Modeling

Photograph of the Modeling by Miss O'Hagan's Class



APPENDIX A
Eight Grade Modeling
Photograph of the Modeling by Miss O'Hagan's Class



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-303-

APPENDIX B

Eighth Grade Modeling

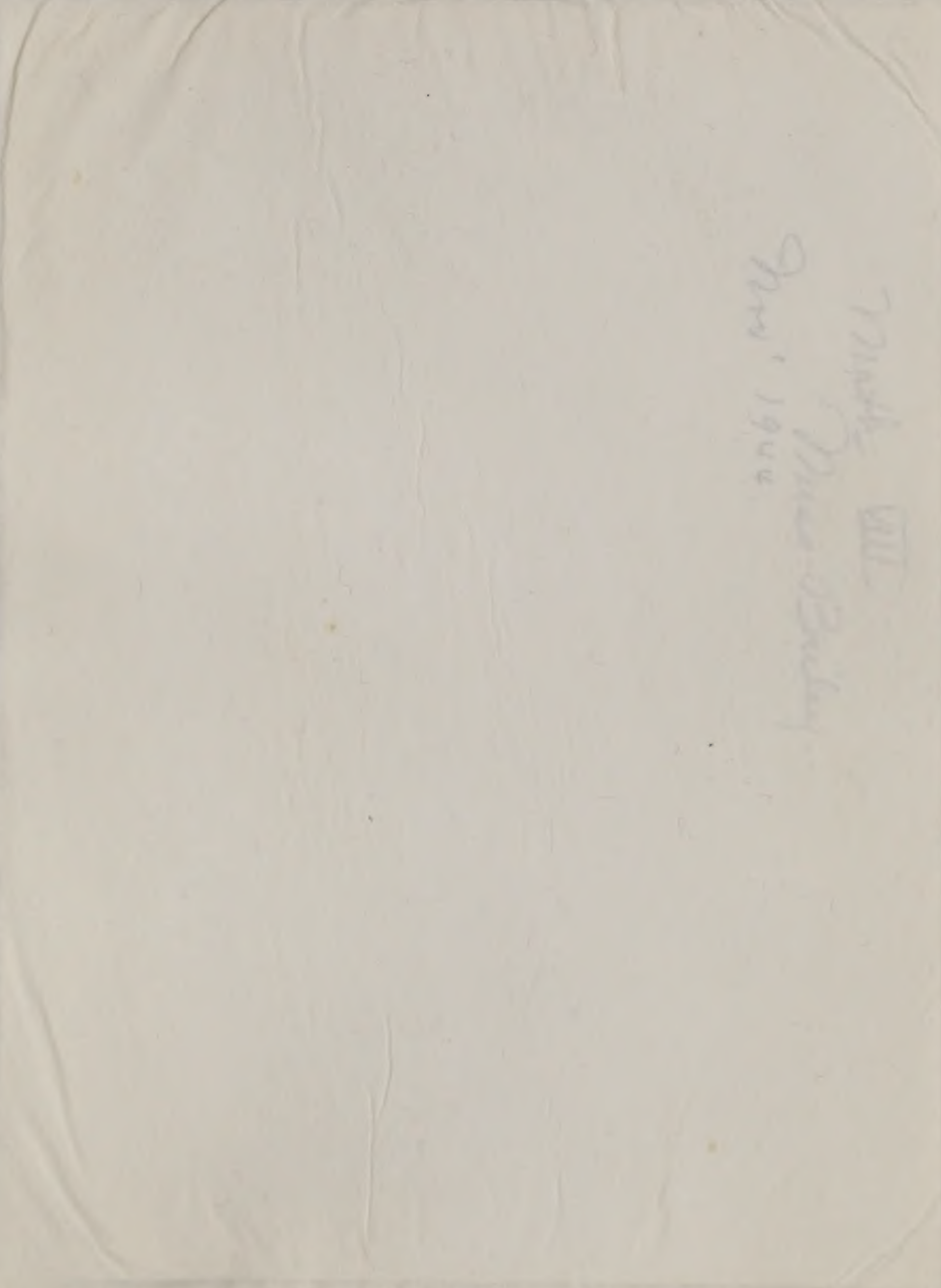
Photograph of the Modeling by Miss Bailey's Class



APPENDIX B

Eight Grade Modeling

Photograph of the Modeling by Miss Bailey's Class



Miss Bailey
Nov. 1944

APPENDIX C

Eighth Grade Modeling

Photograph of the Modeling by Mrs. Meunier's Class



APPENDIX C

Eight Grade Modeling

Photograph of the Modeling by Mrs. Kewler's Class

The Nov-1941
Opport. Mrs. Kewler

APPENDIX D

Eighth Grade Modeling

Photograph of the Modeling by Miss Bartlett's Class



APPENDIX D
Eighth Grade Modeling
Photograph of the Modelled by Miss Bartlett's Class

VIII
Miss Bartlett

APPENDIX E

Seventh Grade Modeling

Photograph of the Modeling by Mrs. Sawyer's Class



APPENDIX E
Seventh Grade Modeling
Photograph of the Modeling by Mrs. Sawyer's Class

Mrs. Sawyer III

APPENDIX F

Seventh Grade Modeling

Photographs of the Modeling by Miss Sinclair's Class



APPENDIX 7
Seventh Grade Modeling
Photograph of the Modeling by Miss Sinclair's Class

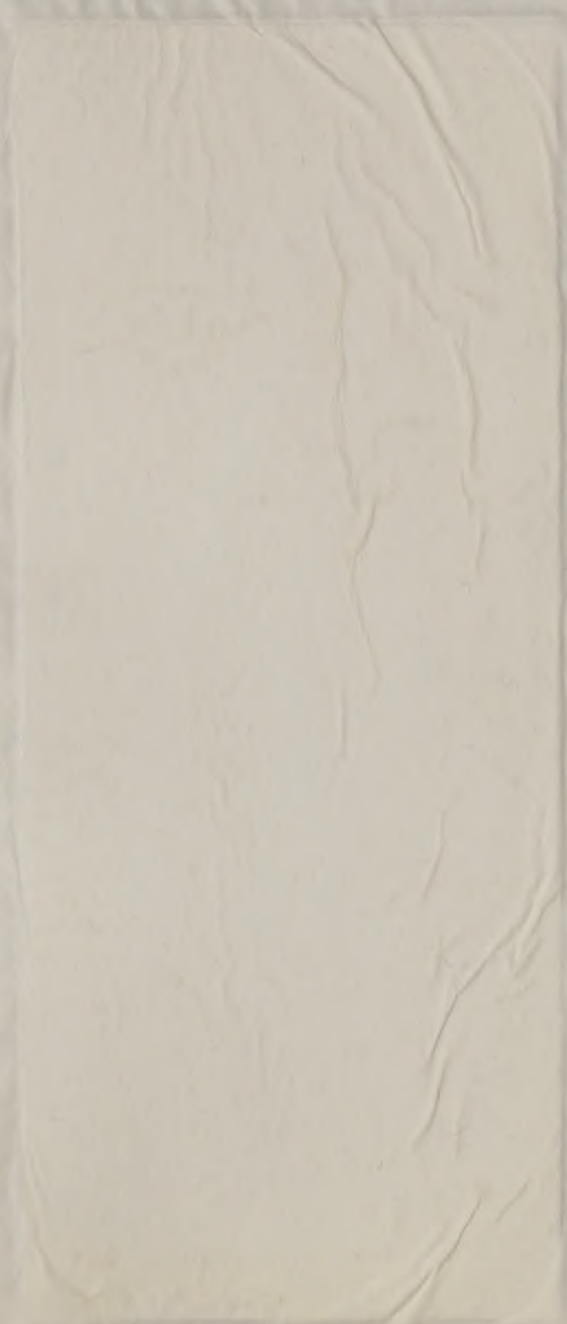
APPENDIX G

Seventh Grade Modeling

Photograph of the Modeling by Mrs. Wales' Class



APPENDIX G
Seventh Grade Modeling
Photograph of the Modeling by Mrs. Wiles' Class



APPENDIX H

Seventh Grade Modeling

Photograph of the Modeling by Miss Irish's Class*

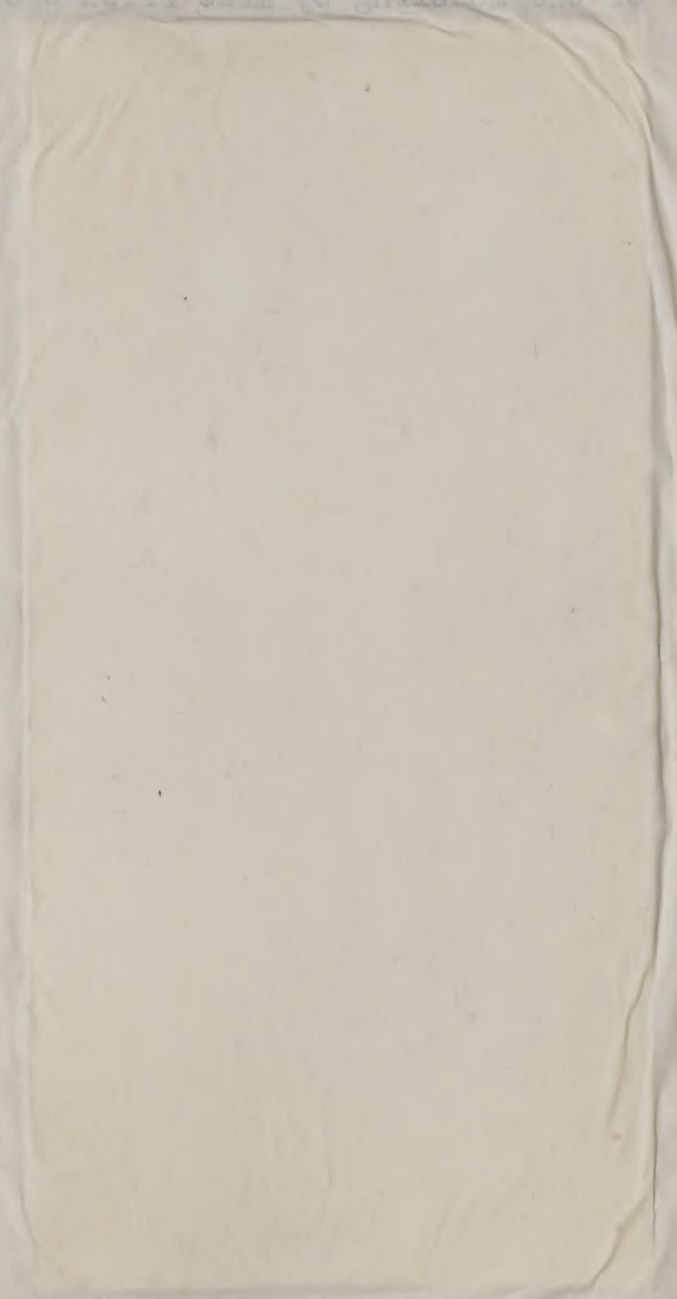


* Photography by Mr. Harris C. Palmer, Barre, Vermont.

APPENDIX II

Seventh Grade Modeling

Photograph of the Modeling by Miss Lillian O'Leary*



* Photograph by Mr. Morris C. Palmer, Barre, Vermont.

APPENDIX I

Choices of Subject in Modeling

The Photographs of Modeling by Mrs. Sawyer's Class



Horse

by Louis Aldrighetti.

Daniel Boone

by George Lucchina.

A Pointer

by Francis Calevro.



Paul Revere

by Paul Tomasini.

Indian Chief

by John Dernavich.

John Paul Jones

by Josephine Rossi.

APPENDIX I

Chosen of Subject in Modeling
The Photographs of Modeling by Mrs. Sawyer's Class

Horse

by Louis Albiggetti.

Daniel Boone

by George Macchini.

A Pointer

by Francis Calveto.

Paul Revere

by Paul Tommasini.

Indian Chief

by John Bernavich.

John Paul Jones

by Josephine Rosati.

Mrs. Sawyer's Class (continued)



Alexander Hamilton

by Marjorie Joy.

Wire Haired Terrier

by Loren Watts.

Molly Pitcher

by Marion Gould.



James Munroe

by Teresa Garcia.

Andrew Jackson

by Adolfo Malnati.

George Washington

by Norberto Garcia



Saint Bernard

by Marion Gould.

British sailor of
the Colonial Period

by Donald Smedy.

A horse

by Clarice Cella.

Mrs. Sawyer's Class (continued)

Alexander Hamilton

by Marjorie Joy.

Wife Hired Textile

by Loren Watts.

Nolly Pitcher

by Marion Gould.

James Munroe

by Teresa Garcia.

Andrew Jackson

by Adolfo Mainetti.

George Washington

by Norberto Garcia

Saint Bernard

by Marion Gould.

British and of
the Colonial Period

by Donald Smedley.

A horse

by Clarence Gellis.

Mrs. Sawyer's Class (continued)



Nathan Hale

by Marilyn King.

Dachshund

by Dante Bai-Rossi.

A pioneer woman

by Barbara Goodroe.



Betsy Ross

by Lucille Beltrami.

George Washington

by Germaine Pinard.

Molly Pitcher

by Louise Geake.



A Dame Teacher

by Grace Rand.

A horse

by James Hallihan.

A Minute Man

by Richard Parnigoni.

Mrs. Sawyer's Class (continued)

Nathan Hale

by Marilyn King.

Boothman

by Gante Sal-Roset.

A Pioneer Woman

by Barbara Goodroe.

Geary Ross

by Lucille Beltrami.

George Washington

by Germaine Minard.

Molly Pitcher

by Louise Geake.

A Bare Teacher

by Grace Rand.

A Horse

by James Hallinan.

A Minute Man

by Richard Barth Goni.

Mrs. Sawyer's Class (concluded)



Martha Washington

by Rose Baratelli.

A Colonial Woman

by Ethelma Doucette.

Ann Hutchinson

by Patricia Saliba.



A squirrel

by Dante Bai-Rossi.

A horse

by George Lucchina.

A rabbit

by James Hallihan.

A horse's head

by Lucille Beltrami.

Martha Washington
by Rose Bartlett.
A Colonial Woman
by Ethelma Donnette.
Ann Hutchinson
by Patricia Saliba.

A squirrel
by Santa Bal-Rossi.
A horse
by George Luchina.
A rabbit
by James Hallinan.
A horse's head
by Lucille Beltrami.

APPENDIX J

Choices of Subject in Modeling

The Written Choices and Reasons of Mrs. Sawyer's Class

A horse.-- "I have chosen a horse because I have a likeness for animals. A horse, early in the United States was most useful to a farmer or a city banker for work and traveling." Louis Aldrighetti.

Daniel Boone.-- "I have chosen to make Daniel Boone because he was a good outdoors man and I sort of like him. We had him in geography." George Lucchina.

A pointer.-- "I am modeling a pointer because I have a hound dog. In the early days men used to get a part of their living by hunting. Sometimes they used dogs to hunt with." Francis Calevro.

Paul Revere.-- "I have chosen Paul Revere because he was a famous man in the beginning of the Revolutionary War. He told the people of Lexington and Concord that the British were coming. He has a funny sort of clothing, and it is very fancy." Paul Tomasini.

An Indian.-- "The Indians were the first people of the United States. The first settlers had to fight them in order to live in peace. The Indians in the West fought hard to keep the white people out too and it was interesting." John Dernavich.

APPENDIX 3

Choices of Subject in Modeling

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An Indian.-- "The Indians were the first people of the United States. The first settlers had to fight them in order to live in peace. The Indians in the West fought hard to keep the white people out too and it was interesting." John Dervavich.

Mrs. Sawyer's Class (continued)

John Paul Jones.-- "I chose to do John Paul Jones because I thought it would be nice to show the uniforms of the olden days to the navy uniforms of today. Also John Paul Jones was a famous navy man. He helped to establish the Navy." Josephine Rossi.

Alexander Hamilton.-- "I am doing Alexander Hamilton because I have read quite a little about him." Marjorie Joy.

A wire-haired fox-terrier.-- "I have chosen a wire-haired fox-terrier because I used to have one and I would like a sculpture of it for my room." Loren Watts.

Molly Pitcher.-- "I modeled a statue of Molly Pitcher the night of the Art Exhibit. I chose this because I could see more details to model on this figure than on anything else." Marion Gould.

James Monroe.-- "I have chosen James Monroe because he was a president of the United States and he was a great man." Teresa Garcia.

Andrew Jackson.-- "I chose to model Andrew Jackson because I could find a good photograph of him. We have been studying about him." Adolfo Malnati.

George Washington.-- "I chose to do the head of Washington because he was the father of our country. He was 'First in war, first in peace, and first in the hearts of

Mrs. Sawyer's Glass (continued)

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first in war, first in peace, and first in the hearts of

Mrs. Sawyer's Class (continued)

his countrymen.'" Norberto Garcia.

A Saint Bernard.-- "I have chosen to model a dog because they are very interesting. I have a dog of my own and I study him carefully every time I see him. I like all animals, especially dogs." Marion Gould.

A British sailor of the Colonial Period.-- "I chose this because we study about it in history. I made a British sailor because they were the ones that impressed our seamen. I am interested in the sailor uniform." Donald Smedy.

A horse.-- "I chose to make a horse because I like them. I thought of George Washington, and decided to make his horse." Clarice Cella.

Nathan Hale.-- "I am making Nathan Hale because he has been in history and he was brave and he died to save his country like they fought in this war. He was hung because he was trying to help to fight the war. He was glad to die for his country. He said, "I only regret that I have but one life to give to my country." He was just like the boys who fought this war, glad to die for us." Marilyn King.

A Dachshund.-- "I am doing a Dachshund because I like to model dogs and a Dachshund is an unusual dog to model." Dante Bai Rossi.

Mrs. Sawyer's Class (continued)

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Dante Bal Rosal.

Mrs. Sawyer's Class (continued)

A pioneer woman.-- "I chose a pioneer woman because I could not think of anything I like better to do." Barbara Goodroe.

Betsy Ross.-- "I have chosen Betsy Ross because she was the very first woman to make the American Flag. She was patriotic." Lucille Beltrami.

George Washington.-- "I have been interested in George Washington for quite a while. In history I liked to read about Washington more than any other man and so I have read a few stories about him and I decided to model him." Germaine Pinard.

Molly Pitcher.-- "The reason I have chosen Molly Pitcher for my clay model is because: 1. It will give us some idea as to how the woman's colonial dress looks like. 2. She is one of the outstanding women of our history. 3. Also she was courageous, we think of her mostly in the Battle of Monmouth." Louise Geake.

A dame school teacher.-- "I chose a dame school teacher because we studied about dame schools in history. I drew a picture for modeling a woman." Grace Rand.

A horse.-- "I chose a horse because horses did some of the work when pioneers moved west. They pulled the wagons." James Hallihan.

A Minute Man.-- "I chose a Minute Man because I am

Mrs. Sawyer's Class (continued)

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A Minute Man.--- "I chose a Minute Man because I am

Mrs. Sawyer's Class (continued)

interested in old times. Minute Men are still famous because of their bravery. I did not make the picture the way they make them now." Richard Parnigoni.

Martha Washington.-- "I have chosen Martha Washington because she is George Washington's wife. Because George Washington was a president." Rosa Baratelli.

A Colonial Woman.-- "I made a Colonial woman because we have been studying about the Colonial days. I wanted the armature I am making to have something to do with history." Ethelma Doucette.

Anne Hutchinson.-- "I am modeling Anne Hutchinson because while studying history I found that she was a very interesting woman. I thought that she would make a good model for clay modeling." Patricia Saliba.

James Madison.-- "I chose James Madison because he was the Father of the Constitution. Helped to sign it and draw it up." Laura Carpenter. (no photograph.)

A gold miner of Forty-nine.-- "I am making a man of the California Gold Rush in 1849 because I am interested in mining. This man is going to have a shovel on his shoulder." Maurice Frigon. (no photograph.)

A tile.-- "I chose to make a buffalo on my tile because I am interested in the larger farms on the plain, and they have large herds of buffaloes. I've also read

Mrs. Sawyer's class (continued)

interested in old times. Minute Men are still famous because of their bravery. I did not make the picture the way they make them now." Richard Barnhart.

Martin Washington.-- "I have chosen Martin Washington because she is George Washington's wife. Because George Washington was a president." Rose Barstall.

A Colonial Woman.-- "I made a Colonial woman because we have been studying about the Colonial days. I wanted the statue I am making to have something to do with history." Ethelma Donette.

Anne Hutchinson.-- "I am modeling Anne Hutchinson because while studying history I found that she was a very interesting woman. I thought that she would make a good model for clay modeling." Patricia Saliba.

James Madison.-- "I chose James Madison because he was the Father of the Constitution. Helped to sign it and draw it up." Laura Carpenter. (no photograph.)

A gold miner of forty-nine.-- "I am making a man of the California Gold Rush in 1849 because I am interested in mining. This man is going to have a shovel on his shoulder." Maurice Trigon. (no photograph.)

A life.-- "I chose to make a buffalo on my life because I am interested in the larger farms on the plain, and they have large herds of buffaloes. I've also read

Mrs. Sawyer's Class (continued)

about buffaloes in books. I had a good picture of a buffalo so I decided to make that on my tile." Daniel Halsall.

John Adams.-- "John Adams was: 1. A Federalist in Massachusetts. 2. A lawyer by profession who gave much time to political service to the young nation. 3. Served as vice-president under Washington. 4. He was the second President of the United States. 5. He made the Alien and Sedition laws." Joseph Chartier. (no photograph.)

Dolly Madison.-- "I am modeling Dolly Madison because she is a very important woman, why, because she saved important documents and Washington's picture when the British came and burned the Capitol down. She was very brave, I guess that is the biggest reason why I'm modeling her." Lorraine Chartier. (no photograph.)

A Colonial school girl.-- "I have chosen to model a school girl because I am interested in the ways in which they did their school work compared with our ways. I am also interested in their costumes." Cynthia Cabrini.

A tile.-- "I am doing plowing in the olden days. The plow is a wooden plow with a man pushing it. To show how the plow is made and how the men work it." Idalyse LaFleur. (no photograph.)

A squirrel.-- (soap carving) Dante Bai Rossi.

A horse.-- (soap carving) George Lucchina.

Mrs. Sawyer's class (continued)

about pictures in books. I had a good picture of a girl
also so I decided to make that my title. "Daniel Halsey."

John Adams. -- "John Adams was: 1. A Federalist in

Massachusetts. 2. A lawyer by profession who gave much
time to political service to the young nation. 3. Served
as vice-president under Washington. 4. He was the second
President of the United States. 5. He made the Alien and

Sedition laws." Joseph Charter. (no photograph.)

Dolly Madison. -- "I am modeling Dolly Madison because

she is a very important woman, why, because she saved
important documents and Washington's picture when the Bri-
tish came and burned the Capitol down. She was very brave.
I guess that is the biggest reason why I'm modeling her."

Lorraine Charter. (no photograph.)

A Colonial school girl. -- "I have chosen to model a

school girl because I am interested in the ways in which
they did their school work compared with our ways. I am

also interested in their costumes." Cynthia Gabriel.

A life. -- "I am doing plowing in the older days. The

plow is a wooden plow with a man pushing it. To show how
the plow is made and how the men work it." Idalyse Lefleur.

(no photograph.)

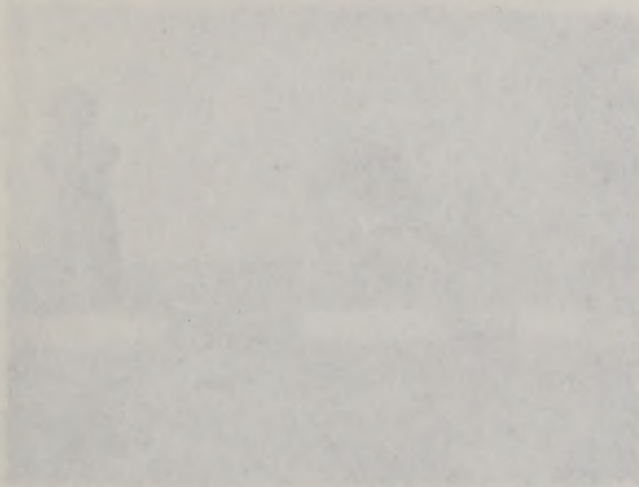
A sculptor. -- (soap carving) Dante Dal Rossi.

A horse. -- (soap carving) George Lucchini.

Mrs. Sawyer's Class (continued)

A rabbit.-- (soap carving) James Hallihan.

A horse's head.-- (soap carving) Lucille Beltrami.



Willis H. H. H.

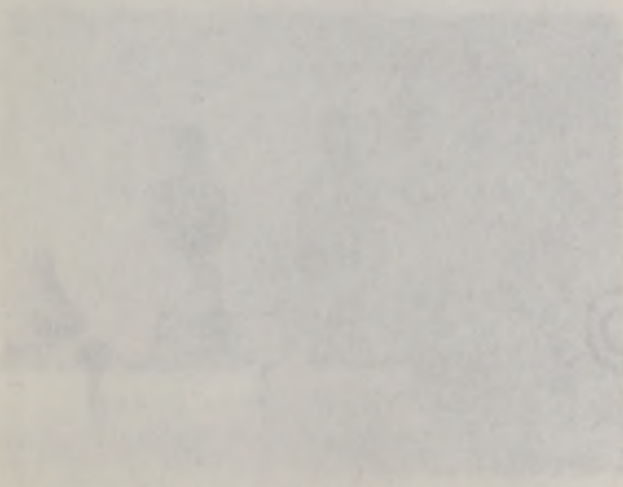
By T. H. H. H.

James H. H. H.

By Richard H. H.

Robert H. H.

By Alice H. H.



A. H. H.

By H. H. H.

Robert H. H.

By Marilyn H. H.

John H. H.

By Albert H. H.

James H. H.

By H. H. H.

Mrs. Sawyer's class (continued)

A rabbit.-- (soap carving) James Williams.

A horse's head.-- (soap carving) Lucille Beltram.

APPENDIX K

Choices of Subject in Modeling

The Photographs of Modeling by Mrs. Wales's Class



Dolly Madison

by Eleanor Biggs.

George Washington

by Richard Kent.

Betsy Ross

by Gloria Haynes.



A duck

by Dean Beckstrom.

Betsy Ross

by Marilyn Whittemore.

Paul Revere

by Robert Phillip.

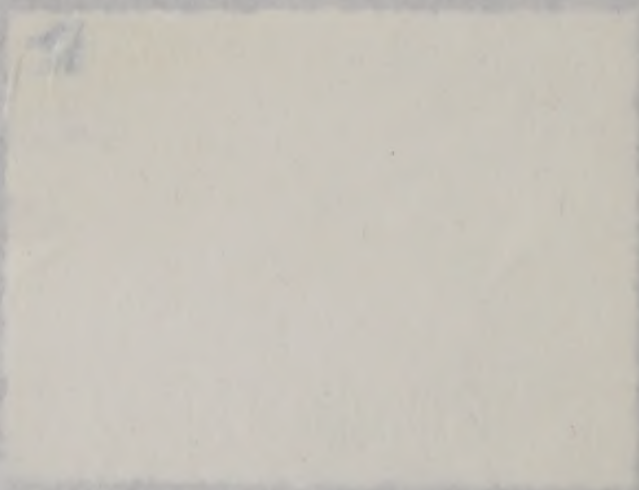
Andrew Jackson

by Louis Gehlbech.

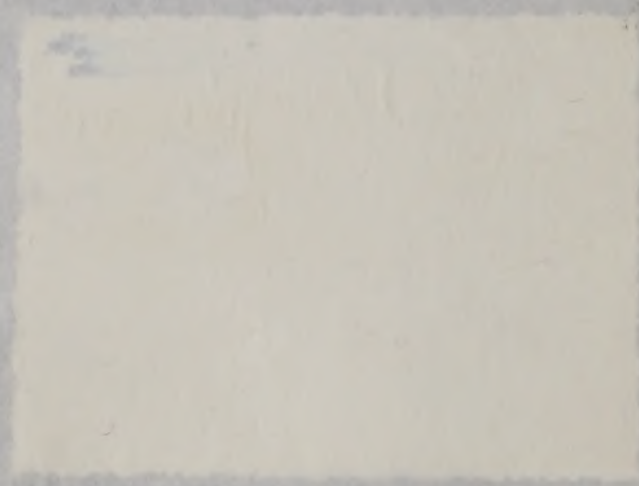
EXHIBIT A

The following is a list of the names of the persons who have been named in the above mentioned report.

John A. Smith
by Robert A. Smith
John A. Smith
by Robert A. Smith
John A. Smith
by Robert A. Smith



John A. Smith
by Robert A. Smith
John A. Smith
by Robert A. Smith
John A. Smith
by Robert A. Smith



Mrs. Wales's Class (continued)

George Washington

by Joyce Scrizzi.

Benjamin Franklin

by Roland St. Peter.

A dish

by June Dodds.

Gene Autry

by Margaret Pearlstein.

A French soldier

by Thomas Gail.

Benjamin Franklin

by Morris Bigras.

Daniel Boone

by William La Count.

Nathan Hale

by Della Johnson.

A British soldier of
the Colonial Period

by James Collins.

Martha Washington

by Carol Livendale.

John Paul Jones

by Robert Wagner.

Mrs. Wallace's Class (continued)

George Washington

by Joyce Sorizal.

Benjamin Franklin

by Roland St. Peter.

A dish

by June Dodds.

Gene Autry

by Margaret Bernstein.

A French soldier

by Thomas Gail.

Benjamin Franklin

by Morris Blase.

Daniel Boone

by William La Count.

Nathan Hale

by Della Johnson.

A British soldier of
the Colonial Period

by James Collins.

George Washington

by Carol Laventale.

John Paul Jones

by Robert Wagner.

Mrs. Wales's Class (concluded)



Molly Pitcher

by Nyla Aldrich.

Priscilla Alden

by Janice LeClair.

A soldier

by Louis Aja.

by John Black.

Pottery

by June Renfrew.

Peter Ross

by Claire Griffin.

Ethan Allen

by Robert Landon.

Mrs. Elsie

by Marion Spooner.

Mrs. Wale's class (continued)

by Nyla Aldrich.
Priscilla Aldrich
 by Janice Jackson.
A Soldier
 by Louis Aja.

APPENDIX L

Choices of Subject in Modeling

The Photographs of Modeling by Miss Sinclair's Class



Pottery

by John Shannon.

A horse

by John Blad.

Pottery

by June Renfrew.



Betsy Ross

by Claire Griffin.

Ethan Allen

by Robert Lawson.

Mrs. Steele

by Marion Spooner.

APPENDIX I

Choices of Subject in Modeling
The Photographs of Modeling by Miss Sinclair's Class

Pottery

by John Shannon.

A Horse

by John Black.

Pottery

by June Renfrew.

Betsy Rose

by Claire Griffin.

Ethan Allen

by Robert Lawson.

Mrs. Steele

by Marion Spooner.

Miss Sinclair's Class (continued)

"Pegleg" Stuyvesant

by Franklin Keene.

Thomas Jefferson

by Beverly Mossman.

John Paul Jones

by Alice Bruce.

Minute Man

by Fred Flint.

George Washington

by Charles Wallace.

Simon Bolivar

by George Pearlstein.

Pottery

by Mary DeForge.

Lafayette

by Ronald Perrin.

Benjamin Franklin

by Garland Corey

Pottery

by Mildred Cummings.

Miss Sinclair's Class (concluded)

Paul Revere

by Baltasar Carcoba.

Alexander Hamilton

by Lewis Dustin.

Daniel Boone

by Ruth Dodds.

Martha Washington

by Betty Biggs.

Benjamin Franklin

by Richard Darling.

An Indian

by Alita Rubalcaba.

Mrs. Steele.-- "I chose Mrs. Steele to model because I had to write a play on her. I am a girl and am interested in the part she played in the war." Marion Spooner.

Peter Stuyvesant.-- "I thought Peter Stuyvesant was an interesting character. Miss Gate thought it would be nice too. He was the only Dutchman who did not want to give up to the British army." Franklin Boone.

APPENDIX M

Choices of Subject in Modeling

The Written Choices and Reasons of Miss Sinclair's Class

Indian pottery.-- "I chose Indian pottery because we studied about the Indians this year, and I thought it would be fun to make pottery like the Indians did." John Shannon.

A horse.-- "I made a horse because they had a lot to do with the Revolutionary War." John Blad.

A dish.-- "I model^{ed} a dish because it was the best to do, and it was fun. Also I like dish." June Renfrew.

Betsy Ross.-- "I chose Betsy Ross because she made the American Flag. And because I am a girl, I thought that it would be nice to model a woman." Clair Griffin.

Ethan Allen.-- "I chose Ethan Allen because he was a great help in the War of 1774-1783. His head is interesting." Robert Lawson.

Mrs. Steele.-- "I chose Mrs. Steele to model because I had to write a play on her. I am a girl and am interested in the part she played in the war." Marion Spooner.

Peter Stuyvesant.-- "I thought Peter Stuyvesant was an interesting character. Miss Cate thought it would be nice too. He was the only Dutchman who did not want to give up to the British Army." Franklin Keene.

Miss Sinclair's Class (continued)

Thomas Jefferson.-- "The reason why I picked Thomas Jefferson is because he wrote the Constitution of the United States of America. I am particularly interested in him and his life history." Beverly Mossman.

John Paul Jones.-- "I chose John Paul Jones. I was interested in his bravery as being the first American Seaman. He made the first navy we ever had." Alice Bruce.

The Minute Man.-- "I chose The Minute Man because I think next to Washington they were the most important part and Washington was chosen." Fred Flint.

George Washington.-- "I chose George Washington because I think that he played an important part in winning the Revolutionary War. And I think that he is one of the important men of our country." Charles Wallace.

Simon Bolivar.-- "I chose to model Simon Bolivar because I am making a collection of stamps showing South American heroes, and I think he played an important part in South American history." George Pearlstein.

Pottery.-- "I chose pottery because I thought it was interesting." Mary DeForge.

Lafayette.-- "I chose Lafayette because I think he played in the history of our country an important part in Valley Forge and in helping to persuade the French to side with us." Ronald Perrin.

Miss Simola's class (continued)

Thomas Jefferson.-- "The reason why I picked Thomas

Jefferson is because he wrote the Constitution of the United States of America. I am particularly interested in him and his life history." Beverly Mossman.

John Paul Jones.-- "I chose John Paul Jones. I was interested in his bravery as being the first American sea-man. He made the first navy we ever had." Alice Bruce.

The Minute Man.-- "I chose The Minute Man because I think next to Washington they were the most important part and Washington was chosen." Fred Flint.

George Washington.-- "I chose George Washington because I think that he played an important part in winning the Revolutionary War. And I think that he is one of the important men of our country." Charles Wallace.

Simon Bolivar.-- "I chose to model Simon Bolivar because I am making a collection of stamps showing South American heroes, and I think he played an important part in South American history." George Bernstein.

Pottery.-- "I chose pottery because I thought it was interesting." Mary DeForge.

Lafayette.-- "I chose Lafayette because I think he played in the history of our country an important part in Valley Forge and in helping to persuade the French to side with us." Ronald Perlin.

Miss Sinclair's Class (continued)

Benjamin Franklin.-- "I chose Benjamin Franklin because I like his wise sayings, also for what he did for us in the Revolutionary War and because he was once a boy I would like to model him." Garland Corey.

Pottery.-- "I chose pottery because it is easy and I have never had clay modeling before and it is much better to start with." Mildred Cummings.

Paul Revere.-- "I chose it because Miss Cate told me to take it." Baltasar Carcoba.

Alexander Hamilton.-- "Hamilton was one of the greatest men in American history; [he] was born in the West Indies in 1757. He began to [make] public speeches at seventeen. [He was] a student at King's College, New York City. [He] later became a lawyer. He died when forty-seven years of age." Lewis Dustin.

Daniel Boone.-- "I took Daniel Boone because I think he is a interesting person, and I think I can do him." Ruth Dodds.

Martha Washington.-- "I chose Martha Washington to model in clay as I have found in books and histories that she played an important part in our war for independence. I also think that the clothing of that period was especially interesting." Betty Biggs.

Miss Sinclair's Class (concluded)

Benjamin Franklin.-- "I took him because he was a great man. And he did a lot for his country." Richard Darling.

An Indian.-- "I chose an Indian because they played a part in the Revolutionary War, and they were one of the first people to live in America." Alita Rubalcaba.

by Margaret Frothingham.

Franklin D. Roosevelt

by Thomas Dodge.

A Webster

by Clifford Dickinson.

An old fashioned farm-
boy

by John Bell'Anlop.

Lincoln

by Dorothy Daniels.

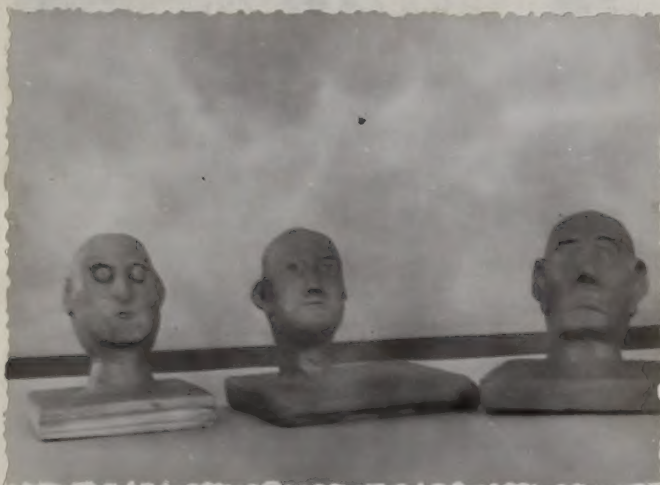
Martha Ball

by Paula Parker.

APPENDIX N

Choices of Subject in Modeling

The Photographs of Modeling by Mr. Curtis's Class



Lincoln

by Marjorie Trowbridge.

Franklin D. Roosevelt

by Thomas Dodge.

Daniel Webster

by Clifford Dickenson.



An old fashioned farmer boy

by John Dell'Amico.

Lincoln

by Dorothy Daniels.

Lucretia Mott

by Sonia Parker.

Mr. Curtis's Class (continued)



A western cow-hand
by Donald McKnight.

Andrew Jackson at New Orleans

by Allan Merrill.

Lincoln, splitting logs
by Alan Walker.



Daniel Webster as a child
by Rena Gusmai.

A nineteenth century school girl

by Elsma Tassie.

Lincoln, splitting rails
by Donald Tarbox.



A nineteenth century woman factory worker

by Patricia Clark.

Lincoln as a store-keeper
by William Santin.

A coal miner

by Charles Monti.

Mr. Curtis's Class (continued)

Lincoln

by Kay Cerasoli.

A water-wheel

by Virginia Carpenter.

An 1850 school teacher

by Anne Seaver.

A modern woman factory worker

by Ann Soucy.

Henry Clay

by Irene Thurston.

A nineteenth century boy factory worker

by Elwin Bourey.

Stephen Foster

by Mary Sassone.

Andrew Jackson

by Robert Trowbridge.

A nineteenth century school girl

by Phyllis Palmer.

Lincoln

by Kay Gerssoll.

A water-wheel

by Virginia Carpenter.

An 1850 school teacher.

by Anne Beaver.

A modern woman factory

worker

by Ann Boney.

Henry Clay

by Irene Thurston.

A nineteenth century

boy factory worker

by Edwin Boney.

Stephen Foster

by Mary Sassone.

Andrew Jackson

by Robert Trowbridge.

A nineteenth century

school girl

by Phyllis Palmer.

Mr. Curtis's Class (concluded)



An old fashioned school

by Katherine Rudd.

A windmill

by Byrle Weeks

Daniel Webster

by Harris Yett.



A modern school girl

by Barbara McLoud.

John C. Calhoun

by William Gladding.

A modern man factory worker

by Alan Moran.

Note: Photography of modeling by the four classes by Miss Alice V. Beckley, Barre, Vermont.

APPENDIX O

The Figures for the First Test

The Standard Deviation, the Standard of Error,
and the Distribution into Five Groups

The Test for the First Unit

	f	d	fd	fd ²
73 -	77	1 + 7	+ 7	49
68 -	72	2 + 6	+ 12	72
63 -	67	5 + 5	+ 25	125
58 -	62	11 + 4	+ 44	176
53 -	57	10 + 3	+ 30	90
48 -	52	10 + 2	+ 20	40
43 -	47	14 + 1	+ 14	14
38 -	42	22		+ 152
33 -	37	13 - 1	- 13	13
28 -	32	6 - 2	- 12	24
23 -	27	5 - 3	- 15	45
18 -	22	4 - 4	- 16	64
13 -	17	1 - 5	- 5	25
8	12	2 - 6	- 12	72
	N = 106		- 73	809

M = the mean
AM = the assumed mean
N = number of cases
Σ = algebraic sum of
Int. = class interval
d = deviation from the assumed mean
f = frequency

$$M = AM + \frac{\sum fd}{N} \times \text{Int. } 1/$$

$$M = 40 + \frac{79}{106} \times 5$$

$$M = 40 + .75 \times 5$$

$$M = 40 + 3.75$$

$$M = 43.75$$

S.D. = standard deviation

$$S.D. = \left[\frac{\sum fd^2}{N} - \left(\frac{\sum fd}{N} \right)^2 \right] \times \text{Int. } 2/$$

$$S.D. = \left[\frac{809}{106} - (.75)^2 \right] \times 5$$

$$S.D. = \left[\frac{809}{106} - .5625 \right] \times 5$$

$$S.D. = \left[7.6321 - .5625 \right] \times 5$$

$$S.D. = \left[7.0696 \right] \times 5$$

$$\begin{array}{r} 106 \overline{) 79.0000} \\ 74 \underline{2} \\ 480 \\ 424 \\ \hline 560 \\ 530 \end{array}$$

$$\begin{array}{r} .75 \\ .75 \\ \hline 375 \\ 525 \\ \hline .5625 \end{array}$$

$$\begin{array}{r} 106 \overline{) 7.6321} \\ 742 \\ \hline 670 \\ 636 \\ \hline 340 \\ 318 \\ \hline 220 \\ 212 \\ \hline 800 \\ 742 \end{array}$$

1/ Claude C. Crawford, The Technique of Research In Education, p. 225. Los Angeles, California: The University of Southern California, 1928.

2/ Ibid., pp. 226-227.

—255—

The Test for the First Unit (continued)

$$\begin{array}{r}
 2.65887 \\
 \sqrt{7.06960000} \\
 4 \\
 46 \overline{) 306} \\
 \underline{276} \\
 3096 \\
 525 \overline{) 2625} \\
 \underline{2625} \\
 47100 \\
 5308 \overline{) 42464} \\
 \underline{42464} \\
 463600 \\
 5316 \overline{) 425344} \\
 \underline{425344} \\
 3825600 \\
 53176 \overline{) 3722369}
 \end{array}$$

$$SD = [2.65887] \times 5.$$

$$SD = 13.4435 = 13.44$$

The standard error of the arithmetic mean.

σ = the standard deviation

N = the number of cases

M = the mean

$$\sigma_M = \frac{\sigma}{\sqrt{N}} \quad 1/$$

$$\sigma_M = \frac{13.44}{\sqrt{106}}$$

$$\sigma_M = \frac{13.44}{10.30}$$

$$\sigma_M = \pm 1.31$$

$$\begin{array}{r}
 1.30485 \\
 10.30 \overline{) 13.4400000} \\
 \underline{1030} \\
 3140 \\
 \underline{3090} \\
 5000 \\
 \underline{4120} \\
 8800 \\
 \underline{8270} \\
 5600
 \end{array}$$

$$\begin{array}{r}
 10.29563 \\
 \sqrt{106.00000000} \\
 202 \overline{) 0600} \\
 \underline{404} \\
 19600 \\
 2049 \overline{) 18441} \\
 \underline{115900} \\
 20585 \overline{) 102925} \\
 \underline{11297500} \\
 20590 \overline{) 1235436} \\
 \underline{6206400} \\
 205912 \overline{) 6177369}
 \end{array}$$

"The chances are 68 in 100 that the true mean lies within the limits of $[43.75 - 1.31$ and $43.75 + 1.31$ or 42.44 and $45.06]$ We may be practically certain that the true mean of the population lies within the limits of $[43.75 \pm 3 \times [1.31]]$ or between $[39.82]$ and $[47.68]$." 2/

The standard error of the standard deviation.

$$\sigma_s = \frac{\sigma}{\sqrt{2N}} \quad 3/$$

$$\sigma_s = \frac{13.44}{\sqrt{2 \times 106}} = \frac{13.44}{\sqrt{212}}$$

$$\sigma_s = \frac{13.44}{14.56} \quad \sigma_s = .92$$

$$\begin{array}{r}
 92308 \\
 14.56 \overline{) 13.4400000} \\
 \underline{13104} \\
 3360 \\
 \underline{2912} \\
 4480 \\
 \underline{4368} \\
 11200
 \end{array}$$

$$\begin{array}{r}
 14.56022 \\
 \sqrt{212.00000000} \\
 24 \overline{) 112} \\
 \underline{96} \\
 285 \overline{) 1600} \\
 \underline{1425} \\
 2906 \overline{) 17500} \\
 \underline{17436} \\
 291202 \overline{) 640000} \\
 \underline{578609} \\
 16639100
 \end{array}$$

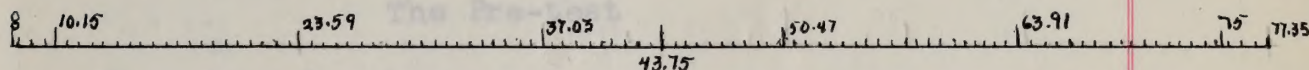
1/ Henry E. Garrett, Statistics In Psychology And Education, p. 201. New York: Longmans, Green and Co., 1939.

2/ Ibid., p. 202.

3/ Ibid., p. 208.

The Test for the First Unit (concluded)

" This means that the chances are 68 in 100 that $[13.44]$ does not differ from the σ by more than $[\pm 0.92]$ The chances are 997 in 1000 that the obtained σ does not differ from the true σ more than $3 \times [0.92]$ or 2.76 . We may be almost certain, therefore, that the true σ lies within $[13.44 \pm 2.76]$ or 10.68 and 16.20 ". \checkmark



The lower end of Group V

$$\begin{array}{r}
 10.15 \\
 - 8.00 \\
 \hline
 2.15 \\
 13.44 \times 2 = 26.88 \\
 \hline
 15.997 \approx 16 \text{ as S.D.} \\
 13.44 \times 15.00000 \\
 \hline
 1344 \\
 8060 \\
 6720 \\
 \hline
 13400 \\
 12096 \\
 \hline
 13040 \\
 12096 \\
 \hline
 9440 \\
 9408
 \end{array}$$

* 20 units = a standard deviation

The five groups (normal)

$$\begin{array}{r}
 43.75 \\
 6.72 \\
 \hline
 37.03 \\
 13.44 \\
 \hline
 23.59 \\
 13.44 \\
 \hline
 10.15
 \end{array}$$

Upper end of Group I

$$\begin{array}{r}
 77.35 \\
 75.00 \\
 \hline
 2.35 \\
 13.44 \times 2 = 26.88 \\
 \hline
 17.8511 \approx 18 \\
 13.44 \times 15.00000 \\
 \hline
 1344 \\
 10060 \\
 9408 \\
 \hline
 6520 \\
 5376 \\
 \hline
 11440 \\
 10752 \\
 \hline
 6880 \\
 6720 \\
 \hline
 1600 \\
 1344 \\
 \hline
 2560
 \end{array}$$

The five groups

- I 64-75, 4 pupils
- II 51-63, 27 pupils
- III 38-50, 44 pupils
- IV 23-37, 24 pupils
- V 8-22, 7 pupils

1/ Henry E. Garrett, op. cit., p. 209.

2/ Roy O. Billett, Fundamentals of Secondary School Teaching With Emphasis On the Unit Method, p. 635.
Boston: Houghton Mifflin Company, 1940.

APPENDIX P

The Figures for the Pre-test

The Standard Deviation, the Standard of Error,
and the Distribution into Five Groups

The Pre-test

	f	d	fd	fd ²
20	2	+9	+18	162
19	3	+8	+24	192
18	6	+7	+42	294
17	4	+6	+24	144
16	1	+5	+5	25
15	12	+4	+48	192
14	1	+3	+3	9
13	8	+2	+16	32
12	8	+1	+8	8
11	11	0	+188	
10	15	-1	-15	15
9	8	-2	-16	32
8	6	-3	-18	54
7	5	-4	-20	80
6	3	-5	-15	75
5	2	-6	-12	72
4	1	-7	-7	49
3	0	-8		
2	2	-9	-18	162
1	1	-10	-10	100
N=99			-131	1697

M = the mean

A.M. = assumed mean

N = number of cases

S = algebraic sum of

Int. = class interval

d = deviation from the assumed mean

F = Frequency

$M = AM + \frac{\sum fd}{N} \text{ Int.}$ 1

$M = 11 + \frac{57}{99} \times 1$

$M = 11.58$

$M = 11.58$

S.D. = standard deviation

$S.D. = \left[\frac{\sum fd^2}{N} - \left(\frac{\sum fd}{N} \right)^2 \right] \times \text{Int.}$ 2

$S.D. = \left[\frac{1697}{99} - \left(\frac{57}{99} \right)^2 \right] \times \text{Int.}$

$S.D. = \left[17.1414 - .3315 \right] \times 1$

$S.D. = \left[16.8099 \right] \times 1$

$\sqrt{16.809900}$

4.09

16

809

8169

163500

77344

15615600

S.D. = 4.09

$$\begin{array}{r} .57575 \\ 99 \overline{) 57.0000} \\ \underline{495} \\ 750 \\ \underline{693} \\ 570 \\ \underline{495} \\ 750 \end{array}$$

$$\begin{array}{r} .5758 \\ .5758 \\ \hline 46064 \\ 28790 \\ 40306 \\ 28790 \\ \hline .33154564 \\ 99 \overline{) 17.1414} \\ \underline{99} \\ 707 \\ \underline{693} \\ 140 \\ \underline{99} \\ 410 \\ \underline{396} \\ 140 \\ \underline{99} \\ 410 \end{array}$$

1/ Claude C. Crawford, The Technique of Research In Education, p. 225. Los Angeles, California: The University of Southern California, 1928.

2/ Ibid., pp. 226-227.

The Pre-test (continued)

The standard error of the arithmetic mean

σ = the standard deviation

N = number of cases

M = mean

$$\sigma_m = \frac{\sigma}{\sqrt{N}} \quad 1)$$

$$\sigma_m = \frac{4.09}{\sqrt{99}}$$

$$\sigma_m = \frac{4.09}{9.95}$$

$$\sigma_m = \pm .41$$

$$\begin{array}{r} 9.95 \overline{) 4.09.000} \\ \underline{3.980} \\ 1100 \\ \underline{995} \\ 1050 \\ \underline{995} \\ 550 \end{array}$$

$$\begin{array}{r} 9.94987 \\ \sqrt{99.000000} \\ 8 81 \\ \underline{189} 1800 \\ 1701 \\ \underline{1984} 9900 \\ 7936 \\ \underline{19859} 196400 \\ 179001 \\ \underline{198988} 1739900 \\ 1691904 \\ \underline{1989967} 14799600 \\ 13929769 \\ \underline{ 869831} \end{array}$$

"The chances are 68 in 100 that the true lies within the limits of $[11.58 - 0.41]$ and $11.58 + 0.41$ or 11.17 and 11.99 . We may be practically certain that the true mean of the population lies within the limits of $[11.58] \pm 3 \times [0.41]$ or between $[10.35]$ and $[12.81]$..." 2)

The standard error of the standard deviation.

$$\sigma_s = \frac{\sigma}{\sqrt{2N}} \quad 3)$$

$$\sigma_s = \frac{4.09}{\sqrt{2 \times 99}}$$

$$\sigma_s = \frac{4.09}{\sqrt{198}}$$

$$\sigma_s = \frac{4.09}{14.07}$$

$$\sigma_s = \pm .29$$

$$\begin{array}{r} 14.07 \overline{) 4.09.0000} \\ \underline{2814} \\ 12760 \\ \underline{12663} \\ 9700 \\ \underline{8442} \end{array}$$

$$\begin{array}{r} 14.07124 \\ \sqrt{198.000000} \\ 1 98 \\ \underline{24} 96 \\ 2807 20000 \\ 19649 \\ \underline{28141} 35100 \\ 28141 28141 \\ \underline{281422} 695900 \\ 562844 \\ \underline{2814244} 13305600 \\ 11256976 \end{array}$$

"This means that the chances are 68 in 100 that $[4.09]$ does not differ from the true σ by more than $[\pm .29]$ The chances are 997 in 1000 that the obtained σ does not differ from the true σ more than $3 \times [.29 \text{ or } .87]$. We may be almost certain, therefore, that the true σ lies within the limits of $[4.09 \pm .87 \text{ or } 3.22 \text{ and } 4.96]$..." 4)

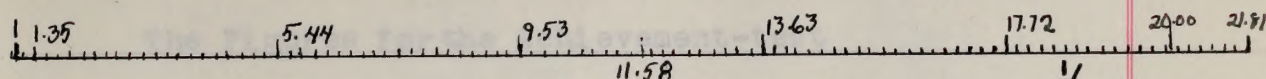
1/ Henry E. Garrett, Statistics In Psychology And Education, p. 201. New York: Longmans, Green And Company, 1939.

2/ Ibid., p. 202.

3/ Ibid., p. 208.

4/ Ibid., p. 209.

The Pre-test (concluded)



The end of Group I

$$\begin{array}{r}
 21.81 \\
 20.00 \\
 \hline
 1.81 \\
 4.09 \overline{) 1.81.0000} \\
 \underline{1686} \\
 1740 \\
 \underline{1636} \\
 1040 \\
 \underline{818} \\
 8.80 \text{ units} \times 2220
 \end{array}$$

* 20 units = 8 S.D. or 6

Lower end of Group V

$$\begin{array}{r}
 5.44 \\
 5.00 \\
 \hline
 .44 \\
 4.09 \overline{) 1.015 \text{ S.D.} = .11} \\
 \underline{409} \\
 3100 \\
 \underline{2863} \\
 2370 \\
 \underline{2045} \\
 2.20 \text{ units} \quad 2250
 \end{array}$$

Lower end of Group V

$$\begin{array}{r}
 \text{Miss Sindair's Grade} \\
 5.44 \quad 4.09 \overline{) 1.44.0000} \\
 \underline{4.00} \\
 1.44 \\
 1227 \\
 \underline{2130} \\
 2045 \\
 \underline{850} \\
 818 \\
 7.00 \text{ units} \quad 320
 \end{array}$$

Lower end of Group V

$$\begin{array}{r}
 \text{Mrs. Sawyer's Grade} \\
 5.44 \quad 4.09 \overline{) 1.840920} \\
 \underline{2.00} \\
 3.94 \\
 3272 \\
 \underline{1680} \\
 1636 \\
 \underline{4400} \\
 3681
 \end{array}$$

Upper end of Group I

$$\begin{array}{r}
 21.81 \quad 4.09 \overline{) 1.687092} \\
 \underline{19.00} \\
 2.81 \\
 2454 \\
 \underline{3560} \\
 3272 \\
 \underline{2880} \\
 2863 \\
 170
 \end{array}$$

Lower end of Group V

$$\begin{array}{r}
 \text{Mrs. Wales's Grade} \\
 1.35 \quad 4.09 \overline{) 1.35.0000} \\
 \underline{1.00} \\
 .35 \\
 3272 \\
 \underline{2280} \\
 2045 \\
 1.80 \text{ units} \quad 2350
 \end{array}$$

The five groups (normal)

$$\begin{array}{r}
 11.58 \\
 \underline{2.05} \\
 9.53 \\
 \underline{4.09} \\
 5.44 \\
 \underline{4.09} \\
 1.35
 \end{array}$$

$$\begin{array}{r}
 11.58 \\
 +2.05 \\
 \hline
 13.63 \\
 4.09 \\
 \hline
 17.72 \\
 4.09 \\
 \hline
 21.81
 \end{array}$$

The five groups for the combined grades

- I 18 - 21, 11 pupils
- II 14 - 17, 18 pupils
- III 10 - 13, 42 pupils
- IV 6 - 9, 22 pupils
- V 1 - 5, 6 pupils

1/ Claude G. Crawford, *The Technique of Research in Education*, p. 235. Los Angeles, California: The University of Southern California, 1928.

1/ Roy O. Billett, *Fundamentals of Secondary-School Teaching With Emphasis On The Unit Method*, p. 635. Boston: Houghton Mifflin Company, 1940.

. 38775

$$\begin{array}{r} .38775 \\ 98 \overline{) 38.00000} \\ \underline{294} \end{array}$$

$$\begin{array}{r} 860 \\ 784 \\ \hline \end{array}$$

$$\begin{array}{r} 760 \\ 686 \\ \hline 740 \end{array}$$

$$\begin{array}{r} 66 \\ \hline 540 \\ 490 \end{array}$$

50

490
50

— .3878
1 — .3878

31024
27146
31024

$$\begin{array}{r} 31024 \\ 11634 \\ \hline .15038884 \end{array}$$

- 2/ Ibid, pp. 226-227.

The Achievement-test (continued)

2.3 0 6 2 9	5.46937
5.31900000	98) 536.00000
4	490
2	460
43	392
131	680
129	588
4406	920
29000	882
27636	380
46122	294
136400	860
92244	
4415600	
46124	
4141241	

$$S.D. = [2.31 \times 3]$$

$$S.D. = 6.93$$

The standard error of the arithmetic mean.

σ = the standard deviation

N = the number of cases

M = mean

$$\sigma_M = \frac{\sigma}{\sqrt{N}} \quad 1/$$

$$\sigma_M = \frac{6.93}{\sqrt{98}}$$

$$\sigma_M = \frac{6.93}{9.90}$$

$$\sigma_M = \pm .70$$

$$9.90) \frac{.7}{6.930}$$

$$\begin{array}{r} 9.8994 \\ \sqrt{98.00000000} \\ 9 \quad 81 \\ 188 \quad 1700 \\ 1969 \quad 1504 \\ 1969 \quad 19600 \\ 19789 \quad 17721 \\ 19789 \quad 187900 \\ 197984 \quad 178101 \\ 197984 \quad 979900 \\ 197988 \quad 791936 \\ 197988 \quad 18796400 \\ 197988 \quad 17819001 \\ 977399 \end{array}$$

"The chances are about 68 in 100 that the true mean lies within the limits of $[19.64 - 0.70$ and $19.64 + 0.70$, or 19.14 and $20.54]$. We may be practically certain that the true mean lies [between] the limits $[19.64 \pm 3 \times .7]$ or between $[17.74]$ and $[21.94]$ " 3/

the standard error of the standard deviation

$$\sigma_s = \frac{\sigma}{\sqrt{2N}}$$

$$\sigma_s = \frac{6.93}{\sqrt{2 \times 98}}$$

$$\sigma_s = \frac{6.93}{\sqrt{196}}$$

$$\sigma_s = \frac{6.93}{14}$$

$$\sigma_s = \pm .50$$

$$\begin{array}{r} 495 \\ 14 \sqrt{6.930} \\ 56 \\ 133 \\ 126 \\ 70 \\ 70 \end{array} \quad \begin{array}{r} 14. \\ \sqrt{169.00} \\ 1 \\ 24 \sqrt{69} \\ 69 \end{array}$$

1/ Henry E. Garrett, Statistics In Psychology And Education, p. 201. New York: Longmans, Green And Co., 1939.

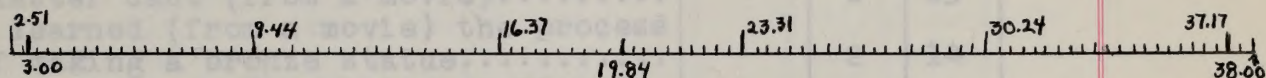
2/ Ibid., 202.

3/ Ibid., p. 208.

The Achievement-test (concluded)

"This means that the chances are 68 in 100 that [6.93] does not differ from the true σ by more than $[\pm 0.50]$...The chances are 997 in 1000 that the obtained σ does not differ from the true σ by more than $[3 \times 0.50]$ or 1.50.

We may be almost certain, therefore, that the true σ lies within the limits of $[6.93 \pm 1.50]$ or between [5.43 and 8.46]." 1/



The lower end of Group V

$$\begin{array}{r} 3.00 \\ -2.51 \\ \hline .49 \end{array} \quad \begin{array}{r} 6.93 \times 4.90000 \\ \hline 48.51 \\ 49.00 \end{array}$$

$$\begin{array}{r} .07 \\ 20 \\ \hline 1.40 \text{ units} \times \end{array}$$

$\times 20 \text{ units} = 28 \text{ D.D. or } \sigma$

Lower end of Group V

$$\begin{array}{r} \text{Mrs. Sawyer's Grade} \\ 9.44 \\ 7.00 \\ \hline 2.44 \end{array} \quad \begin{array}{r} 6.93 \times 2.44.0000 \\ \hline 20.79 \\ 36.10 \\ 34.65 \\ \hline 45.00 \\ 41.08 \end{array}$$

$$\begin{array}{r} .35 \\ 20 \\ \hline 7.00 \text{ units} \end{array}$$

Lower end of Group V

$$\begin{array}{r} \text{Mrs. Wales's Grade} \\ 9.44 \\ 6.00 \\ \hline 3.44 \end{array} \quad \begin{array}{r} 6.93 \times 4.96.0000 \\ \hline 27.72 \\ 66.80 \\ 62.37 \\ \hline 44.30 \\ 41.58 \\ 27.2 \end{array}$$

$$\begin{array}{r} .50 \\ 30 \\ \hline 10.00 \text{ units} \end{array}$$

The upper end of Group I

$$\begin{array}{r} 38.00 \\ 37.17 \\ \hline .83 \end{array} \quad \begin{array}{r} 6.93 \times 1.196.0000 \\ \hline 69.3 \\ 13.70 \\ 6.93 \\ \hline 6.770 \\ 6.237 \\ \hline 43.30 \\ 41.08 \end{array}$$

$$\begin{array}{r} .12 \\ 20 \\ \hline 2.40 \text{ units} \end{array}$$

Lower end of Group V

$$\begin{array}{r} \text{Mr. Curtis's Grade} \\ 16.37 \\ 12.00 \\ \hline 4.37 \end{array} \quad \begin{array}{r} 6.93 \times 4.37.0000 \\ \hline 41.58 \\ 21.20 \\ 20.79 \\ \hline 41.00 \\ 34.65 \\ 6.35 \end{array}$$

$$\begin{array}{r} .63 \\ 20 \\ \hline 12.00 \text{ units} \end{array}$$

Upper end of Group I

$$\begin{array}{r} \text{Mrs. Wales's Grade} \\ 32.00 \\ 30.24 \\ \hline 1.76 \end{array} \quad \begin{array}{r} 6.93 \times 1.176.0000 \\ \hline 25.35 \\ 13.86 \\ 37.40 \\ 34.65 \\ \hline 27.50 \end{array}$$

$$\begin{array}{r} .25 \\ 20 \\ \hline 5.00 \text{ units} \end{array}$$

The Five groups (normal)

$$\begin{array}{r} 19.84 \\ -3.47 \\ \hline 16.37 \\ -6.93 \\ \hline 9.44 \\ -6.93 \\ \hline 2.51 \end{array} \quad \begin{array}{r} 19.84 \\ +3.47 \\ \hline 23.31 \\ +6.93 \\ \hline 30.24 \\ +6.93 \\ \hline 37.17 \end{array}$$

The Five groups for the combined grades

- I 31-38, 5 pupils
- II 24-30, 27 pupils
- III 17-23, 34 pupils
- IV 10-16, 27 pupils
- V 3-9, 5 pupils.

1/ Henry E. Garrett, op. cit., p. 209.

2/ Roy O. Billett, Fundamentals of Secondary-School Teaching With Emphasis On The Unit Method, p. 635. Boston: Houghton Mifflin Company, 1940.

Table 2. Gains in knowledge claimed by pupils in summaries.

Subject	The Four Classes			
	Sin.	S.	C.	W.
(1)	(2)	(3)	(4)	(5)
I know figure proportion, using the head as a unit of measure	15	11	10	4
I learned to model a figure in clay.	8	7	15	
I learned the process of making a plaster cast (from a movie).....		1	15	
I learned (from a movie) the process of making a bronze statue.....		2	14	
I know there is a statue of Lincoln in the Lincoln Memorial.....			5	
Cyrus Dallin made busts and statues of Indians.....				15
Cyrus Dallin made the statue of Paul Revere.....			1	
I know how to make an armature.....	15	22	11	19
I know how to model a tile		1	4	
I know how to model a head	7	7	10	
A sculptor has to plan his work either on paper or by a small model.	12		1	13
I know the works and lives of famous sculptors.....		3	9	
I saw many pictures in magazines....			4	
I read information in magazines ,...			3	
I found out where to write for information about how to prepare to be a sculptor			1	
One has to be smart to be a sculptor			3	
A stone cutter needs three years of experience before he becomes a journeyman			1	
A letter carver needs the same experience as the stone cutter			1	
A polisher needs only two years of experience before he becomes a journeyman		7	1	
The frieze of the Parthenon			1	
The decrease of Tuberculosis in Vermont			1	
Information given by teacher on sculpture			1	
Daniel Chester French modeled Lincoln		1	2	
Clay models are sometimes shellacked				

* Sin., S., C., and W. represent the names of the teachers of the four classes.

Table 2. (continued)

Subject	The Four Classes			
	Sin.	S.	C.	W. *
(1)	(2)	(3)	(4)	(5)
The decrease of Tuberculosis in Vermont		1	1	
Information given by teacher on sculpture		1	1	
Daniel Chester French modeled Lincoln Clay models are sometimes shellacked and painted		1	2	
Statues are made of many different materials		1	1	
How to make figures stand up straight I know several statues of Lincoln and who made them	2	4	1	
I have learned of a woman sculptress. Modeling requires patience and time.. Casting requires skill		1	1	
I learned how an artist modeled a dog (movie).....		1	1	
It was a very interesting unit and it was a lot of fun to do it	1	1	5	
Gutzon Borglum made the Mt. Rushmore Memorial in the Black Hills of South Dakota		1	2	2
He also did the Twelve Apostles.....		1	1	14
He also worked on Stone Mr., Georgia. I gained experience in modeling		2	1	9
I learned about the tools used for making a statue	7	1	1	12
Learned how big statues are made.....	2	8	1	3
A good statue can be spoiled by putting it in a poor place		1	1	15
Men make statues only to please the people who live after them.....		1	1	11
I learned how to make tools which are helpful in modeling	3	7	1	8
I learned to carve soap (gave full details).....	5	8	1	16
Sculpture has made me understand the shape of the human body and that of animals	1	5	2	6
I learned the design of a Colonial woman's dress	1	1		

* Sin., S., C., and W. represent the names of the teachers of the four classes.

Table 2. (continued)

Subject	The Four Classes			
	Sin.	S.	C.	W.
(1)	(2)	(3)	(4)	(5)
I learned the design of a Colonial woman's hair-do.....		1		
It brought back my history work....	1	1		1
I learned what makes statues and drawings so beautiful.....	9	1		5
Sculpturing is a good trade to learn.....		1		
I have learned what tools are used for wood carving.....		2		
I never knew that you could make so much out of clay.....		1		
I often wondered how it (the clay) would stand without anything to hold it up		1		
I will make more figures and heads this summer with my own clay.....		1		
Everything is made out from the figure and not by drawing lines....		1		
If I took enough time maybe I could really make something that looked like something.....		1		
Cyrus E. Dallin made the Appeal to the Great Spirit.....		1		
I have learned how to use calipers.		2		
I have learned how to prepare clay for modeling	7	1		12
Four great sculptors are: Cyrus Dallin, Gutzon Borglum, Daniel Chester French, and Augustus Saint-Gaudens.....				15
Gutzon Borglum carved Lincoln sitting down.....				11
I learned to model dishes.....	1			1
There is a shape to everything you make	1			
It takes patience when you do soap carving so as not to break the pieces.....	1	5	2	6
I learned a lot about the shape and muscles (of the figure), especially about in the legs.....	1			

Table 2. (concluded)

Subject	The Four Classes			
	Sin.	S.	C.	W.
(1)	(2)	(3)	(4)	(5)
What I have learned from modeling will help much more when I draw something.....	1			
You add the clothes and the decor- ative parts last.....	9	1	4	5
Ronald Perrin	11		23	
Baltasar Garroba	15		16	
Charles Wallace	absent		29	
Betty Biggs	15		27	
Marion Spooner	13		19	
Alice Bruce	10		15	
Beverly Woodman	8		14	
Alice Rubalcaba	13		22	
Franklin Keene	4		17	
John Shannon	9		17	
Claire Griffin	10		17	
Robert Lawson	10		25	
Richard Darling	13		absent	
Lewis Dustin	13		10	
Mildred Cummings	9		17	
Mary DeForge	absent		10	
John Blad	5		15	
Ruth Dodds. (registered late)	7		left	
Jane Kenfrew. (registered late)			3	

Table 3. The Intelligence Quotients and the results of the pre-test and the achievement-test of Miss Sinclair's class.

Pupil	I.Q.	Pre-test	Achievement-test
(1)	(2)	(3)	(4)
Fred Flint	129	15	28
George Pearlstein	127	17	19
Ronald Perrin	119	11	25
Baltasar Carcoba	116	15	16
Charles Wallace	116	absent	29
Betty Biggs	115	15	27
Marion Spooner	111	13	19
Alice Bruce	109	10	15
Beverly Mossman	106	8	14
Alita Rubalcaba	105	13	22
Franklin Keene	105	4	17
John Shannon	104	9	17
Claire Griffin	104	10	17
Robert Lawson	98	10	25
Richard Darling	98	13	absent
Lewis Dustin	97	10	10
Mildred Cummings	96	9	17
Mary DeForge	83	absent	10
John Blad	69	5	15
Ruth Dodds..(registered late)		7	left
June Renfrew.(registered late)			3
Marlisa King	97	6	14
Germaine Pinard	96	absent	16
Rosa Saratelli	93	10	15
Lucille Saltrani	93	7	15
Marjorie Joy	88	15	14
Idalyse Lafleur	85	12	7
Maurice Frigon	80	7	12
Lorraine Chartier (registered late)	12		(moved)
Joseph Chartier .(registered late)	8		(moved)

Table 4. The Intelligence Quotients and the results of the pre-test and the achievement-test of Mrs. Sawyer's class.

Pupil	I.Q.	Pre-test	Achievement-test
(1)	(2)	(3)	(4)
George Lucchina	133	19	31
Daniel Halsall	126	15	25
Clarice Cella	124	11	26
John Dernavich	124	18	22
Marion Gould	123	18	38
Francis Calevro	122	13	24
Cynthia Cabrini	120	2	7
Ethelma Doucette	118	7	14
Grace Rand	117	12	27
Josephine Rossi	117	13	25
Norberto Garcia	116	11	26
Louise Geake	116	absent	12
Barbara Goodroe	116	17	22
Paul Tomasini	112	13	16
Patricia Saliba	109	10	21
Louis Aldrighetti	109	15	25
Teresa Garcia	108	10	13
James Hallihan	107	9	absent
Laura Carpenter	106	10	10
Loren Watts	104	15	18
Dante BaiRossi	100	7	21
Donald Smedy	99	12	24
Adolfo Malnati	98	10	17
Richard Parnigoni	97	8	32
Marilyn King	97	6	14
Germaine Pinard	96	absent	16
Rosa Baratelli	93	10	15
Lucille Beltrami	93	7	15
Marjorie Joy	88	15	11
Idalyse LaFleur	85	12	7
Maurice Frigon	80	7	12
Lorraine Chartier(registered late)	12		(moved)
Joseph Chartier .(registered late)	8		(moved)

Table 5. The Intelligence Quotients and the results of the pre-test and the achievement-test of Mr. Curtis's class.

Pupil	I.Q.	Pre-test	Achievement-test
(1)	(2)	(3)	(4)
Anne Seaver	130	15	absent
Harris Yett	125	15	23
William Gladding	119	10	12
Patricia Clark	119	17	23
Kay Cerasoli	119	11	21
Alan Moran	117	12	20
Dorothy Daniel..(Registered late)			29
Marjorie Trowbridge...	116	19	20
Sonia Parker	115	20	24
Mary J. Sassone	114	9	23
Rena Gusmai	114	13	24
Allan Merrill		18	29
Katherine Rudd	113	18	29
Robert Trowbridge	112	12	16
Thomas Dodge	111	18	absent
Elwin Bourcy	111	10	17
John Dell'Amico	110	18	15
Ann Soucy	108	8	17
Charles Monte	107	10	20
Alan Walker	106	15	24
Clifford Dickenson ...	105	11	26
William Santin	105	9	17
Donald Tarbox	104	15	26
Phyllis Palmer	103	8	18
Elsma-Lee Tassie	103	11	16
Donald McKnight	97	12	23
Barbara McLoud	97	11	12
Virginia Carpenter ...	91	absent	21
Byrle Weeks	89	9	26
Irene Thurston		5	17

Table 6. The Intelligence Quotients and the results of the pre-test and the achievement-test of Mrs. Wales's class.

Pupil	I.Q.	Pre-test	Achievement-test
(1)	(2)	(3)	(4)
Louis Gehlbach	122	20	32
Joyce Scrizzi	122	11	32
Robert Phillip	120	10	29
Della Johnson	117	11	23
Eleanor Biggs	117	19	24
Luis Aja	116	9	22
Janice LeClair	116	10	26
Roland St.Peter		15	24
Carol Livendale	114	6	27
Nyla Aldrich		10	20
James Collins	101	13	17
Dean Beckstrom	100	14	15
Marilyn Whittmore ...	97	11	10
Robert Wagner	96	10	23
Richard Kent	92	16	21
June Dodds	88	11	13
Gloria Haynes	86	8	10
Maurice Bigras	76	1	6
Thomas Gale	72	6	14
Margaret Pearlstein ..	69	2	8
David Partch		9	moved

MEMORANDUM

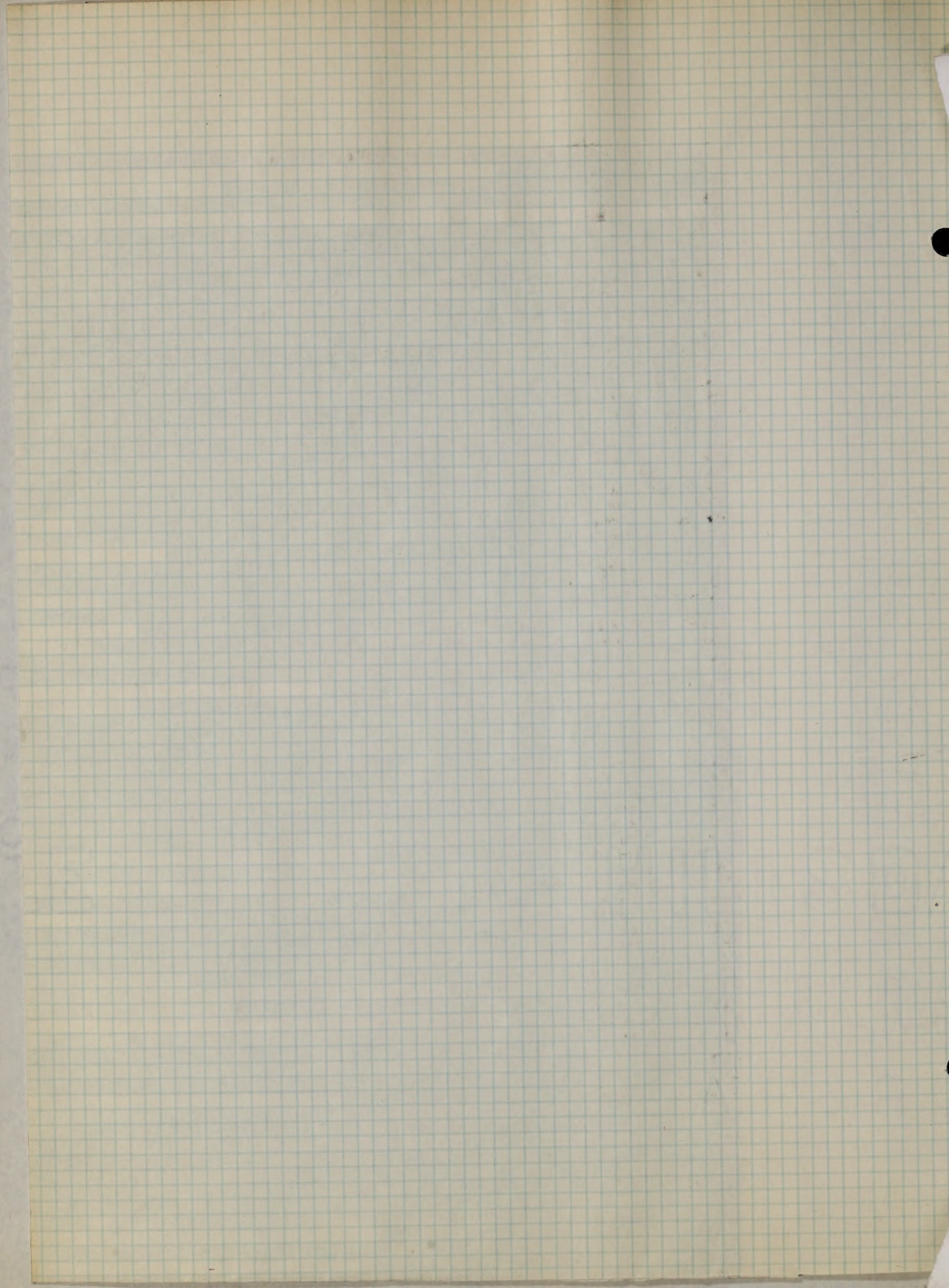
TO : THE BOARD OF DIRECTORS
FROM : THE MANAGER
SUBJECT : [Illegible]

(1)	(2)	(3)	(4)
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20
21	21	21	21
22	22	22	22
23	23	23	23
24	24	24	24
25	25	25	25
26	26	26	26
27	27	27	27
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32	32	32	32
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34	34	34	34
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36	36	36	36
37	37	37	37
38	38	38	38
39	39	39	39
40	40	40	40
41	41	41	41
42	42	42	42
43	43	43	43
44	44	44	44
45	45	45	45
46	46	46	46
47	47	47	47
48	48	48	48
49	49	49	49
50	50	50	50
51	51	51	51
52	52	52	52
53	53	53	53
54	54	54	54
55	55	55	55
56	56	56	56
57	57	57	57
58	58	58	58
59	59	59	59
60	60	60	60
61	61	61	61
62	62	62	62
63	63	63	63
64	64	64	64
65	65	65	65
66	66	66	66
67	67	67	67
68	68	68	68
69	69	69	69
70	70	70	70
71	71	71	71
72	72	72	72
73	73	73	73
74	74	74	74
75	75	75	75
76	76	76	76
77	77	77	77
78	78	78	78
79	79	79	79
80	80	80	80
81	81	81	81
82	82	82	82
83	83	83	83
84	84	84	84
85	85	85	85
86	86	86	86
87	87	87	87
88	88	88	88
89	89	89	89
90	90	90	90
91	91	91	91
92	92	92	92
93	93	93	93
94	94	94	94
95	95	95	95
96	96	96	96
97	97	97	97
98	98	98	98
99	99	99	99
100	100	100	100



Figure 4. The number of the entire group who had each question right in the test for the first unit.

* The vertical column of numbers represents the questions. The horizontal bar of numbers represents the pupils. The chart is read as follows: Fourteen pupils had question number one correct.



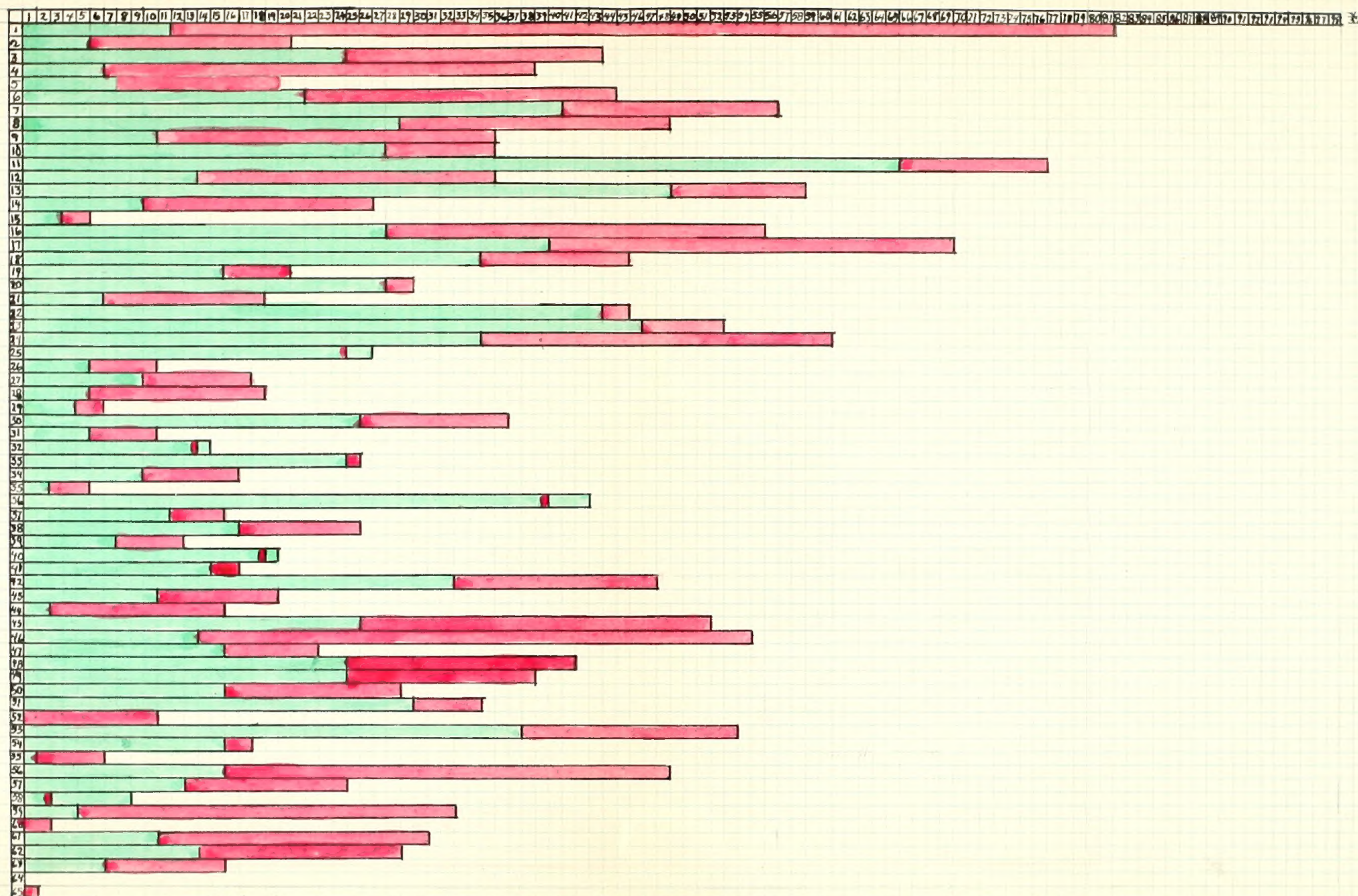
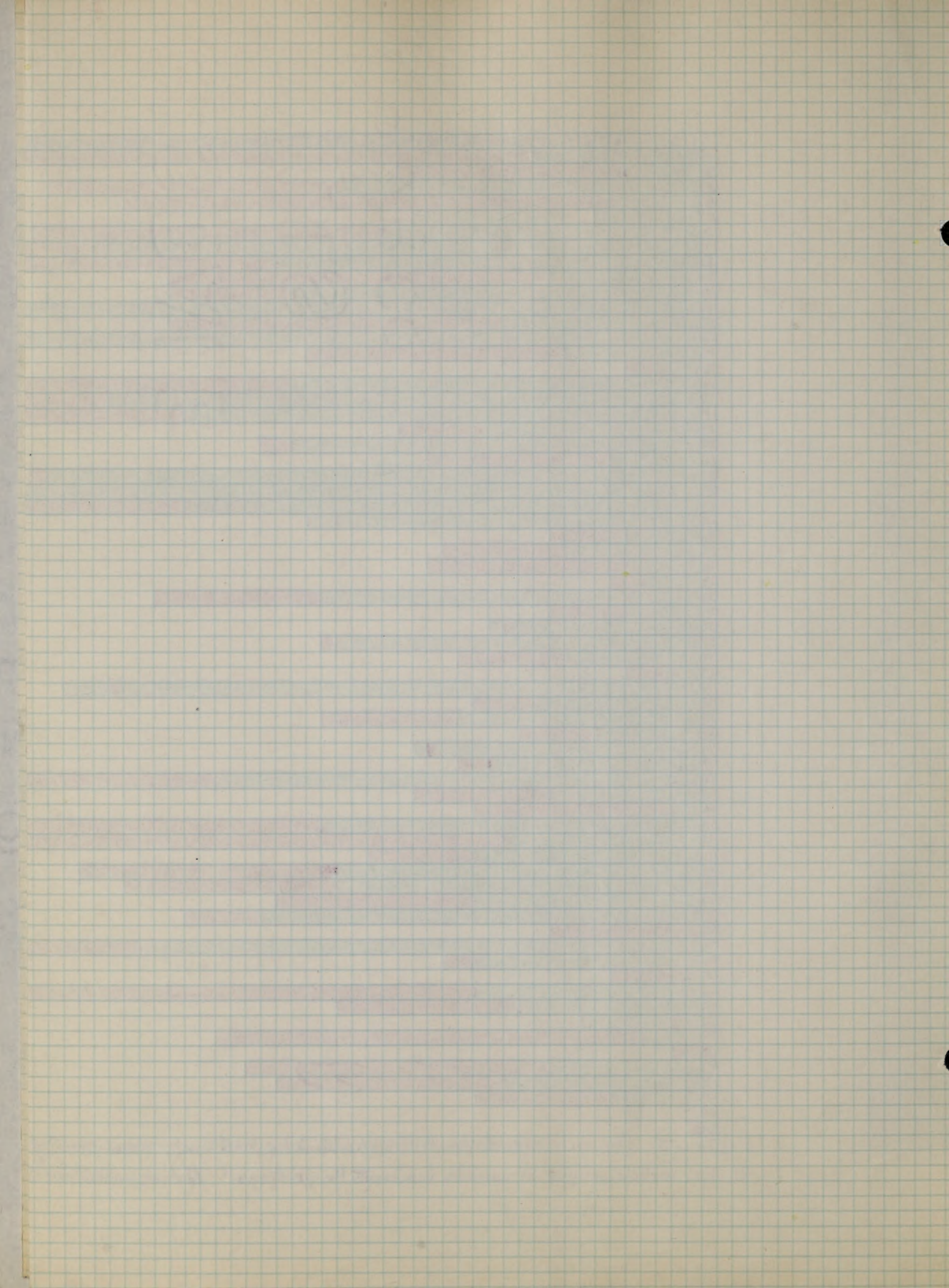


Figure 5. The number of the entire group who had each question right for: — the pretest, and — the achievement-test.
 * The vertical column of numbers represents the questions. The horizontal bar of numbers represents the pupils.



SELECTED BIBLIOGRAPHY

The American Federation of Arts. Art School Directory, Volume I for the years 1939-1940. Washington, D.C.: The American Federation of Arts, Inc., 1939. 11+ 158 pp.

A directory of art schools of the United States by states. Special indexes of foreign, architectural, and summer, art schools. Special index of fellowships and scholarships.

Aznive, Grace Nevart. "The Function of Art Education In Secondary Schools." Unpublished Master of Education Thesis. Boston, Mass.: Boston University, 1932. 1 + 103 pp.

Aims; objectives; topical areas; special courses; elective and required of general or appreciation courses; central themes having large social values; projects or problems organized around pupils' interests; integration with other subjects of the curriculum; and an excellent bibliography.

Beard, Charles A. A Charter for the Social Sciences In the Schools. Report of the Commission on the Social Studies, Part I. New York: Charles Scribner's Sons, 1932. xii + 122pp.

The plan of the Commission. In many respects it is a preview of the Conclusions.

Beard, Charles A. The Nature of the Social Studies. Report of the Commission on the Social Studies, Part VII. New York: Charles Scribner's Sons, 1934. x + 230pp. A more technical definition of the subject than that by A. C. and D. H. Bining.

Bement, Alan. Figure Construction, p. 2. Boston: The Gregg Publishing Company, 1930. The simple proportions for the figure.

Billett, Roy O. Fundamentals of Secondary School Teaching with Emphasis on the Unit Method. Boston: Houghton Mifflin Company, 1940. vi + 671 pp. A comprehensive study of the essentials of the growth of secondary education and the unit method. The necessary psychology and genetics of an individual are explained to reveal the causes of individual differences and to indicate that teaching must provide

SELECTED BIBLIOGRAPHY

The American Federation of Arts. Art School Directory, Volume I for the years 1939-1940. Washington, D.C.: The American Federation of Arts, Inc., 1939. 11 + 128 pp.

A directory of art schools of the United States by states. Special indexes of foreign, architectural, and summer, art schools. Special index of fellowships and scholarships.

Adams, Grace Nevart. "The Function of Art Education in Secondary Schools." Unpublished Master of Education Thesis. Boston, Mass.: Boston University, 1932. 1 + 103 pp.

Aims; objectives; topical areas; special courses; effective and required of general or appreciation courses; central themes having large social values; projects or problems organized around pupils' interests; integration with other subjects of the curriculum; and an excellent bibliography.

Beard, Charles A. A Chapter for the Social Sciences in the Schools. Report of the Commission on the Social Studies, Part I. New York: Charles Scribner's Sons, 1932. xii + 128 pp.

The plan of the Commission. In many respects it is a preview of the Commission's. Beard, Charles A. The Nature of the Social Studies. Report of the Commission on the Social Studies, Part VI. New York: Charles Scribner's Sons, 1934. x + 250 pp.

A more technical definition of the subject than that by A. C. and D. H. Bining.

Bement, Alan. Future Construction, p. 2. Boston: The Gregg Publishing Company, 1930. The simple proportions for the figure.

for them. Clear statements of the criteria of the unit, the delimitation, the unit assignment, the study guide, and the various methods of evaluating pupil growth.

Billings, Neal. The Social Studies Curriculum. Baltimore: Warwick and York, Inc., 1929.

Bining, A. C. and D. H. Teaching the Social Studies in the Secondary Schools, Ch. 1 and 2., pp. 332-334. New York: McGraw-Hill Book Company, Inc., 1935. A definition of the subjects usually included in the social studies.

Bode, Boyd H. Conflicting Psychologies of Learning. New York: D. C. Heath and Company, 1929. v + 305 pp. An explanation of the points upon which the various theories of psychology have agreed and diverged.

Bode, Boyd H. Democracy As A Way of Life. New York: The Macmillan Company, 1939. v + 1444 pp. A very clear explanation of the meaning of American Democracy today and a definite challenge to education to discover and promote the pattern. Democracy and education are valuable for unit building, good teaching, and better thinking.

Caffin, Charles H. American Masters of Sculpture, pp. 3-17, 55-70. New York: Doubleday, Page & Company, 1903. Good for college level. Good photographs of the Sherman Monument, Grief, and the portrait of Robert Louis Stevenson by Augustus Saint-Gaudens. Pictures of Death and the Sculptor, Detail of the Clark Monument, and Alma Mater by Daniel C. French are shown.

Columbia University, Teachers College, Members of the Fine Arts Staff. Art Education Today. An Annual Devoted to Problems of Art Education. New York: Bureau of Publications, Teachers College, Columbia University, 1935. 1 + 78 pp. Fifteen articles by qualified educators in art. Descriptions of present conditions; in methods of teaching; in variety of materials; and a suggestion of present needs.

Commission on The Social Studies in The Schools. Conclusions and Recommendations of the Commission. New York: Scribner's Sons, 1934. xi + 169 pp. A frame of reference for the social studies.

for them. Clear statements of the criteria of the unit, the delimitation, the unit assessment, the study guide, and the various methods of evaluating pupil growth.

Billing, Neal. The Social Studies Curriculum. Baltimore: Warwick and York, Inc., 1939.

Bishop, A. C. and D. H. Teaching the Social Studies in the Secondary Schools. Ch. I and 2, pp. 332-334. New York: McGraw-Hill Book Company, Inc., 1935. A definition of the subjects usually included in the social studies.

Bode, Boyd H. Conflict Psychology as of Learning. New York: E. G. Hecht and Company, 1939. v + 305 pp. An explanation of the points upon which the various theories of psychology have agreed and diverged.

Bode, Boyd H. Democracy As a Way of Life. New York: The Macmillan Company, 1939. v + 144 pp. A very clear explanation of the meaning of American Democracy today and a definite challenge to education to discover and promote the pattern. Democracy and education are valuable top unit building, good teaching, and better thinking.

Carlin, Charles H. American Masters of Sculpture, pp. 3-17, 55-70. New York: Doubleday, Page & Company, 1935. Good for college level. Good photographs of the Sherman Monument, Grant, and the portrait of Robert Louis Stevenson by Augustus Saint-Gaudens. Pictures of Death and the Sculptor, Detail of the Clark Monument, and Alma Mater by Daniel C. French are shown.

Columbia University, Teachers College, Members of the Fine Arts Staff. Art Education Today. An Annual Devoted to Problems of Art Education. New York: Bureau of Publications, Teachers College, Columbia University, 1938. 1 + 75 pp. Fifteen articles by qualified educators in art. Description of present conditions; in methods of teaching; in variety of materials; and a suggestion of present needs.

Commission on The Social Studies in The Schools. Goals and Recommendations of the Commission. New York: Southern's Sons, 1934. xi + 165 pp. A frame of reference for the social studies.

Commonwealth of Pennsylvania Department of Public Instruction. Course of Study in Art Education for Elementary and Secondary Schools. Bulletin 41. Harrisburg, Pennsylvania, 1933. 5 + 110 pp.

No indication of a correlation of art with the social studies.

The Dalton Schools, Board of Trustees. The Dalton Schools, Incorporated, 108 East 89th Street, New York City, pp. 27, 32, 37, 39. New York: Published by the order of The Trustees, 1944.

Democracy; art forms in Europe; function of early religions; and respect due to other cultures; are aims of the upper schools. Skill; knowledge of color; design; expression of ideas and feelings; joy of creative experience with others; development of self-reliance and cooperation; are the aims of the lower school.

Dewey, John. How We Think, pp. 17-34, 102-118, ch. 2, ch. 7. Boston: D. C. Heath and Company, 1933.

The two chapters on reflective thinking are valuable because unit building is a process of arranging for reflective thinking.

Follett, Helen. This Way to Latin America. New York: Published by the Horace Mann-Lincoln School of Teachers College, Columbia University, with the cooperation of the Office of The Coordinator of Inter-American Affairs, 1943. v. + 84 pp.

A well written and detailed description of the development of two units of work. The senior unit is stated in full. The junior unit is shorter. History, geography, art, music, speech, writing, cooking, and dramatics are all developed in relation to the study of Latin America.

Giles, H. H. and McCutchen, S. P. and Zechiel. Exploring the Curriculum. Curriculum Making in the Social Studies. The work of the thirty schools from the viewpoint of the Curriculum Consultants. New York: Harper & Brothers, 1942. xvii + 337 pp.

There was very little evidence of correlation of art with the social studies.

Giovannangeli, Arthur J. "Unit Organization of Three Topics in Seventh-, and Eighth- Grade, General Science with Special Reference to the Supervision of Cadet Teachers." Unpublished Master's Thesis, Boston University, School of Education, 1939. x + 161 pp.

A sample of units with demonstrations throughout the assignment. Several introductions for each unit.
A good correlation between school and the community.

Glass, F. J. Modelling And Sculpture. London: B. T. Barsford LTD., 94 High Holborn, 1929. v + 139 pp.

An excellent detailed description of modeling, casting, composition, mould making, bronzing, coloring, and the finishing of casts. Stone carving, metal casting, proportionate enlargement are also included. A college level book.

Greene, Carroll O. "Four Units for an Eighth Grade Class in American History." Unpublished Master's Thesis, Boston University, School of Education, 1938. i + 110 pp.

A very full description of the community, school, and class which are considered in building the unit. An explanation of the construction of the unit. It was prepared for five classes.

Johnson, Ruth V. "Unit Organization of the Topic Agriculture, for a Seventh Grade Course in Occupations." Unpublished Master's Thesis, Boston University, School of Education, 1938. i + 243 pp.

An unusual and rich development of a central unit with several shorter units. The shorter units are studied by groups who make reports to the class. The definitions of the terms of the unit are brief but clear.

Kearns, Fannie M., and Others. "Growing Through Art, Source Units For The Enrichment of the Art Experience In the Seventh, Eighth, Ninth, and Tenth Grades." (Mimeographed). Art Curriculum for Seventh, Eighth, Ninth, and Tenth Grades, June 1944. Pasadena, California: Department of Education. 111 + 42 pp.

A superior art education curriculum. The goals contribute to those of general education characteristics of good teaching. Minimum requirements of each grade level: units divided into statements, purposes, understandings, attitudes and appreciations, and skills and abilities, suggested subject-matter, suggested activities, developmental activities, culminating activities, evaluation and bibliography for teacher and pupil.

Koffka, K. The Growth of the Mind, An Introduction to Child Psychology, pp. 198-218. New York: Harcourt Brace & Company, Inc., 1931.

The experiments with the apes help one to understand

how children's goals must be constantly changing as they proceed at their own rate of learning toward their understandings of the goals in a unit.

Krupka, Stella H. "Unit Organization of Four Topics in English for the Eighth School Year." Unpublished Master's Thesis, Boston University, School of Education, 1939. 1 + 159 pp.

The introduction to the unit, "The Spirit of Christmas" is excellent. The organization of the unit "The Writing of Business Letters" is very well done. The definition of the delimitation is brief but very clear. The art suggestions are good.

March, Leand S. "Pictures In Social Studies Teaching." Journal of Social Education, 1(January, 1941), pp. 26-30.

The use of cartoons, pictures, photographs, and slides as visual aids. The cooperation of the Social Studies classes with the art department in the development of cartoons. Excellent list of companies and addresses for picture material. Directions for copying pictures and cartoons with the camera.

Mather, Frank Jewett, Jr., Morey, Charles Rufus, and Henderson, William James. The American Spirit in Art. The Pageant of America. Vol. XII, pp. 179-189. New Haven, Conn.: Yale University Press, 1927. The pictures are small and plentiful. Many sculptors are included.

Michner, James (editor). The Future of the Social Studies. Curriculum Series: Number One of the National Council for the Social Studies. 13 Lawrence Hall, Kirkland Street, Cambridge, Mass.: 1939. iii + 169 pp.

Mitchell, James P., and Others. "Reports of Experimental Work." (Mimeographed). Courses of Study for the Ninth, Tenth, Eleventh, and Twelfth Grades, 1936-1937. Chicago: Francis W. Parker School. 80 pp. A correlation of art with English and the Social Studies. "Art Through the Ages" by Helen Gardner, is the text used. Trips, discussions, and slides are used. The essay type of test is given with slides. Some provision is made for individual differences. The beginning clay work had three assigned problems. Eleventh graders chose original problems.

Morphett, Mabel Vogel, Weedon, Vivian, and Washburne, Carlton. "Winnetka Chart For Determining Grade Place-

ment of Children's Books. Winnetka, Illinois: Winnetka Public Schools.
This chart was used to check the words that went into the organization of the unit, Sculpture. Doubtful words were also checked with the grade teachers.

Munro, Thomas, and Others. Art in American Life and Education, pp. 207-215, 448-600, 721-814. Fortieth Yearbook of the National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Company, 1941.

A series of papers written by the recognized art leaders of the United States. Some of the studies are scientific while others are the reports of existing conditions. The two papers on the sculptor's problems emphasize: contemporary American Sculpture; and the aims of sculptor. There are eleven books in the bibliography. The bibliographies of the book are exhaustive.

National Council of Teachers of English. A Correlated Curriculum, pp. 117, 157, 176. Monograph Number 5, New York: D. Appleton-Century Company, 1936.
A brief indication of how art expands experience.

Park, Ethel M. "Four Units in English Literature for Children in Their Eighth School Year." Unpublished Master's Thesis, Boston University, School of Education, 1938. pp. vii + 191.
The optional related activities for the unit on Treasure Island are interesting and appropriate. The explanation of the terms of the unit are very complete.

Parker School, Francis W. "Art Appreciation." (Mimeographed). Report of Experimental Work, Francis W. Parker School, 1935-1936. Chicago: Francis W. Parker School. 10 pp.

Excellent general and specific objectives of the Art appreciation course are stated. A correlation is indicated between English, the Social Studies and Art. The Art teacher visited the other classes. Trips were taken which benefited all three classes. "Art [was] studied in relation to the lives and the thinking of the people who produced it." Understanding the Arts by Helen Gardner was the text used in the ninth grade. The tenth and eleventh grades used Art in America edited by Cahill and Barr. Questions for trip to Art Institute gave an opportunity for pupil's opinion. The amount of ground covered seemed too much for the detail included.

Payant, Felix. Our Changing Art Education. Columbus, Ohio: Hermaic Studio Publishing Co., 1936. 1 + 32 pp.
A series of essays on aims, objectives, and methods.

Pierce, Anne E. and Hilbert, Robert S. Instruction In Music and Art. In Two Parts. National Survey of Secondary Education Bulletin, No. 17. Monograph No. 25. Washington, D. C.: United States Government Printing Office, 1932. 1 + 61 pp.
A survey of: trends of art education; studies of courses; and reports of visits. Trend of objectives; aims; organization; topics; correlation with other subjects; time allotments; grade placement of subject matter; provision for pupil's needs; and provision for revision are all covered.

Progressive Education Association. Social Studies in General Education. Commission on the Secondary-School Curriculum. Committee on the Function of the Social Studies in General Education. New York: Progressive Education Association, 1939. v + 389pp.
No indication of a correlation of the social studies and art.

Progressive Education Association Publications. Thirty Schools Tell Their Story, pp. 34, 47, 51-59, 131-132, 189, 196, 293, 309-311, 328, 349, 391-394, 410-411, 437, 456, 503-507. Adventure in American Education, Vol. V. Commission on the Relation of School and College. New York: Published by Harper & Brothers, 1943.
Statements of aims for the social studies and art.
Reports on correlation of art with the core.

Progressive Education Association Publications. The Visual Arts In General Education, pp. 1-50. Commission on Secondary-School Curriculum. New York: D. Appleton-Century Company, Incorporated, 1940.
A frame of reference for teaching art in the secondary schools; the aim of art education in the secondary school; the adolescent in art; and the stages of the adolescent and his needs.

Proske, Beatrice Gilman. Brookgreen Gardens Sculpture. S.C.: Printed By Order of The Trustees, 1943. v + 510 pp.
The introduction gives a history of American sculpture. (pp. xv-xxxviii). This has notes and 142 references. The 146 sculptors are each represented by: one photograph; a concise, well-written biography; the

description of several works; notes; and bibliographical references. The book is a catalog. There is a map of the gardens on which numbers indicate the location of the statues. The book is for college level.

Sexson, John A. To the Board of Education, Pasadena City Schools. The art section of the annual report by the Superintendent of Pasadena City Schools. Pasadena, California: Department of Education, Pasadena, California, 1943. 56 pp.

A superior, annotated, picture book showing every important phase of student's art work from kindergarten through high school. It is very skillfully written to educate adults.

Schultz, Harold. "Experimental Course of Study In Art Appreciation, Ninth, Tenth, and Eleventh Grades." (Mimeographed). Report of Experiment Work, Francis W. Parker School, 1937-1938. Chicago: Francis W. Parker School. 3 pp.

Plan is similar to that of 1936-1937. The classes discuss: the school's collection of paintings; the Coffey-Pepper Bill; and the gallery of contemporary Chicago art within the school.

An art gallery was started. Pupils visited artists and wrote articles about them. The artists were invited to school.

A special discussion course was provided for intelligent seniors and Art and Music teachers. No examinations, no readings, no creative work, and no marks. The group discussed any current art problem.

. "Experimental Course of Study, Art Appreciation." (Mimeographed). Courses of Study for the Ninth, Tenth, and Eleventh Grades, 1938-1939. Chicago: Francis W. Parker School. 6 pp.

The social studies and art classes, with the exception of one group, met together with both teachers present. There was more discussion, and the classes were more flexible than when they were separate. Special interest in Life Magazine. A survey of interests. Art in the ninth grade was planned in relation to war, peace, religion, economics, and politics.

The International Water-color Exhibition was attended and discussed. Students asked for discussion on the great masters in the Renaissance and the Modern Periods.

. "Experimental Course of Study, Art Appreciation." (Mimeographed). Courses of Study for

the Ninth Grade, and the Eleventh Grades, 1939-1940. Chicago: Francis W. Parker School. 3 pp.

The plan is similar to the previous plans. Exhibits of streamlining, textiles, architecture, photography, and all-over patterns were sent to the school from the Art Institute. Members of the Art Institute Staff discussed art with the students.

Dr. Bruno Bettelheim of the Progressive Education Association directed work on evaluation of appreciation through a non-verbal test and through written reactions to a group of seven large colored reproductions of paintings.

State Department of Education, Montpelier, Vermont. Suggested Course of Study and Teacher's Manual for Art Education, Grades I-VIII, pp. 43-71. Montpelier, Vermont: Issued by authority of State Board of Education, 1943.

Lists of suggested activities indicate ample opportunity for correlation with the social studies. Sample lesson procedures, and outcomes are indicated. A chart, "Basic Elements of Art Structure", as summarized in the Report of the Federated Council on Art Education, is given on pages 60-62. There is a good bibliography and a section on Sources of Art Materials.

Stevenson, R. L. "Function of Art Education In The Junior High School." Unpublished Master of Education Thesis. Boston, Mass.: Boston University, 1933. 114 pp. An excellent survey of the aims of art education of the junior high school level.

Tannahill, Sallie B., Mitchell, Edith I., and Others. "Art Education, How Art Contributes to Our Daily Living, Grades Seven through Twelve." (Mimeographed). Art Curriculum for the Seventh, Eighth, Ninth, Tenth, Eleventh, and Twelfth Grades, 1943. Wilmington, Delaware: Wilmington Public Schools. 189 pp. A superior art curriculum. The guiding principles of general education in the Wilmington Public Schools are stated and the criteria for the evaluation of a pupil's growth are suggested. Skills are given their place in the learning process. The units have the following parts: Integrating Idea; Overview; Suggested Approaches; Assimilative Material; and Culminating Activities. There is evidence of provision for a wide range of individual differences. Correlation with the social studies is not directly planned, but the approaches and activities might well be those of the optional related activities

of a social studies course. A very large bibliography.

Toft, Albert. Modelling And Sculpture. London: Seeley, Service & Co., Limited, 196 Shaftesbury Avenue, 1929. v + 347 pp.

An excellent book that covers every detail of modeling, carving, and casting. The glossary of terms is adequate and the photographs would almost be enough text for a junior high student.

The University of The State of New York, The State Department of Education. Correlated Syllabus in Art Education For The Junior High School Years. Albany: The University of New York Press, 1936. 5 + 104 pp.

There is no indication of a correlation of art with the social studies.

Wheeler, R. H. The Science of Psychology. New York: Thomas Y. Crowell Company, Publishers, 1929. xvii + 556 pp. Some explanations of how we learn. The tests and the quoted authorities indicate reliability. Valuable knowledge for planning for individual differences, in goals, problems, and practice materials, in the development of the unit.

Winslow, Leon Loyal. The Integrated School Art Program. New York: McGraw-Hill Book Company, Inc., 1939. vii + 391 pp.

Art Courses for elementary, junior, and senior high schools. The programs use educational and psychological principles. The learning is divided into four stages: (1) orientation; (2) design; (3) forming products; and appreciation. The description of the tests is adequate. The bibliography is excellent.

Winslow, Leon L., and Others. "Tentative Course of Study, Art for Junior High Schools, (Grades Seven to Nine inclusive)." (Mimeographed). 1944. Baltimore, Maryland: City of Baltimore, Department of Education, 3 + 175 pp.

An excellent course of study. The general objectives are listed under: informational knowledge; skill in art processes and techniques; and character development. The minimum requirements for each grade are not stated. The units are divided into information, experiences, and activity experiences. An excellent short bibliography follows each unit. The units are taught in the same four stages indicated in The Integrated School Art Program. No definite correlation is made with the social studies, although the

material would make it possible. The final bibliography cannot be compared with that of either the Delaware Course of Study or the Pasadena Course of Study.

material would make it possible. The final bibliography cannot be compared with that of either the Delaware Course of Study or the Pasadena Course of Study.

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